



## DOCTOR OF EDUCATION (EDD)

### **The reflective beginner: Promoting self-awareness of newly qualified teachers using the video-glasses strategy to enhance their professional development**

Yaffe, Elka

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# **The Reflective Beginner**

## **Promoting Self-awareness of Newly Qualified Teachers Using the Video-glasses Strategy To Enhance their Professional Development**

submitted by Elka Yaffe  
for the degree of EdD  
of the University of Bath  
2003

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## **Terms and Abbreviations**

**NQTs** - Newly Qualified Teachers

**PD** – Professional Development

**EPMs** – Expert Pedagogical Mentors, pedagogical experts from the college, who have at least 10 years experience in educating student teachers, and 3-4 years of experience in supporting NQTs

**SCM** - Feuerstein's theory of Structural Cognitive Modifiability explains the universal phenomena and offers guidelines for a systematic intervention, serves as the basis for turning content into process with the help of mediation.

**MLE** –Mediating Learning Experience, in the framework of Feuerstein's theory is the modality of interaction unique to human existence and is considered as the proximal factor that determines the flexibility and plasticity of the human mind that then leads to SCM.

**Action- Research** – A systematic and critical self-reflective inquiry made public (Stenhouse, 1974) It is not simply problem-solving, it involves problem posing. It does not start from a view of '*problems*' as pathologies. It is motivated by a quest to improve and understand the world by changing it and learning how to improve it.

**Andragogy** – Defined as the pedagogy of adult people (Knowles, 1995)

**Reflection** – Dewey (1933) considered this to be a special form of problem solving. It may be seen as an active and deliberative cognitive process, involving sequences of interconnected ideas that take account of underlying beliefs and knowledge.

**Critical Reflection** – We use a '*psychological*' approach in which the complexity of '*self-awareness*' and '*professional development*' are considered most important. Some take this to mean no more than constructive self-criticism of one's actions with a view to improvement (Calderhead, 1989), others refer to criticism of society.

**Stages** – moving in *time* from one stage to another, chronologically.

**Levels** – moving vertically higher or lower in *depth* of thinking, reflecting, mediating.

**Dimensions** – in *space* (three dimensions), for example in Vonk's model of the Pyramid of Professional Development

**Phase** – moving in time in the same project, or in the same year.



## Abstract

The study explores the promotion of professional self-awareness of NQTs<sup>1</sup> using an innovative videotaping learning strategy<sup>2</sup>, during the induction year. The process describes a complex structure that focuses on facilitating reflection, deepening personal understanding and stimulating critical thinking and reflecting.

The expanded Action research accompanying the task of the Expert Pedagogical Mentors (EPMs) involves not only a basic dilemma but also many contradictions – they try to help the NQTs not only to survive but at the same time to increase their professional self-awareness. It encompasses other support cycles contextually and as a source for learning and improving.

Several aspects of educational research are dealt with: Time, the first year of teaching – a professional ZO-PED<sup>3</sup>. Tool - an innovative technology, the video-glasses. Methodology, an Action research with a hermeneutic way of interpretation. Reflective Monologue, the first step to promoting professional self-awareness. Reflective Dialogue - mediating reflection to NQTs, bridging the ZO-PED.

The research questions and the structure emerged from the pilot study. It is organized in two sections, aims and objectives. Both the aims and the objectives began to formulate on the ground of several basic assumptions<sup>4</sup>. The overarching aim was to explore how reflection with the help of video glasses can promote and improve professional self-awareness of NQTs. Several objectives emerged from the different phases of the study: defining dimensions of Professional Development, making '*tacit knowledge*' explicit, enhancing '*mediation*' and following a desired shift in '*teachers concerns*'.

A variety of theoretical perspectives were used to explore the complexity of NQTs performance and reflection. The main findings clarify '*patches*<sup>5</sup> of profession', '*demystify*' the teaching process and show new ways to promote self-awareness and analyse Professional Development of NQTs. The findings will be illustrated by many examples. The last part will lead back to the theoretical perspectives '*ground the findings*' by expanding the theories and explaining the knowledge we gained.

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<sup>1</sup>Newly Qualified Teachers

<sup>2</sup> Reflecting with an expert mentor on recorded lessons with a special instrument - Video-glasses.

<sup>3</sup> Zone of Proximal Development - Vygotsky

<sup>4</sup> E.g. reflection is important, stimulated recall enhances reflection, NQTs have tacit knowledge, the first professional year is important, good teachers are concerned about their pupils and so on.

<sup>5</sup> Term borrowed from new theories about desert ecology, meaning that every situation is a small world

## Preface

As project coordinator, during the second year of the induction project<sup>6</sup>, while it was still in its experimental stage, I had serious deliberations, as to how to help beginning teachers during their first year of teaching. I not only wanted to help them survive the many difficulties faced on a daily basis but to also continue to enrich their professional development which had commenced during their educating period in the college. Within the framework of the induction project during its initial years, we were able to formulate our ultimate purpose, to integrate a support model, to study it and propose it to the Ministry of Education. The main dilemma facing us was how to actually provide greater and more significant support. In one of the discussions held by the team management, the following metaphor was used: “They’re always asking for ‘tips’ for aspirins to solve their problems and we, the pedagogical mentors, recommend they take non-conventional homeopathic medicine to strengthen their immune systems and help them, not only during their first year of teaching, but also in the future.”

On one of the days I had these serious deliberations I read an article in the ‘*Scientific Innovations*’ column of a daily newspaper about an electronics plant in one of the kibbutzim in northern Israel that was manufacturing a new technology. They had taken two common devices: eyeglasses and a video camera, and combined them to form ‘*video glasses*’<sup>7</sup>. The article mentioned that this device had military, industrial and medical applications and I thought to myself – perhaps I could also apply this device to education.

After visiting the plant and studying the device, which was small and expensive, I convinced individuals from the Oranim School of Education of its potential in education, obtained budget to purchase one set of video glasses immediately and another set the following year. Since then, the team management of the induction project and I have been encouraging beginning teachers to record their classes using the video glasses without any other person being present in the class, and entirely from their own ‘*view-point*’. By mediating the right attitude towards critical reflection and critical pedagogy we started this professional journey.

From this time on, we have not stopped learning new things about the world of beginning teachers, about their teaching situations, concerns, problems, creative

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<sup>6</sup> The project will be explained in details as the practical layer of the research.

solutions, frustrations and successes. The subject of this research is the induction project in Israel as implemented in the Oranim School of Education, but the aim and core of the research enquiry lies in its attempt to study the learning processes of Newly Qualified Teachers (NQTs) and their EPMs (Expert Pedagogical Mentors). The research will be based on repeated observations recorded using the video glasses strategy.

The research was ethnographic as we sought to understand and then to explain the complex realities that a small number of NQTs experienced within their specific teaching settings. The analytical process was based on content analysis of the accumulated documentation. Trends and commonalities were identified; stages of reflection were sorted and resorted and these were crosschecked and triangulated. The research was inductive as it sought to develop theory that was grounded in the evidence and therefore produced conclusions, which are high in validity (Strauss and Berliner, 1996). Thus, this research does not claim generalisability but it offers a proposition to be tested by others. We are increasingly more convinced that we are just scraping the surface regarding the potential of this device and strategy. In the last section of this work I will propose additional directions for future research.<sup>8</sup>

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<sup>7</sup> See please appendix 1

*"They were the most significant and interesting moments that I experienced during my first year of teaching...I had time to stop and look again at my class, not like an outside observer, but from my own viewpoint ...I had time to feel, think, reflect and explain to myself and others, my feeling and thoughts..." (Sari<sup>9</sup> - a NQT<sup>10</sup>)*

## **1. Introduction – Rationale and Main Research Questions**

The purpose of this study is to create new knowledge about teaching issues, to explore the promotion of professional self-awareness of NQTs who use a new reflective videotaping learning strategy during their induction year. The notions of what characterises teachers development at different stages, interested me from my first days of educating student teachers, more than ten years ago. The process describes a complex structure that emerged from previous phases of research and focuses on facilitating reflection, deepening personal understanding and stimulating critical thinking and reflecting. In addition to promoting self-awareness we aim to track and analyse the professional development of NQTs, in order to be able to give support and empower them in their first year when they pass from the '*threshold stage*' to the '*stage of growing into the profession*'.

The process by which this self-awareness is formed can be understood by exploring evidence of internalization. Tharp and Gallimore explain:

"The process of internalization is not the *transferral* of an external activity to a preexisting, internal '*plane of consciousness*'. It is the process in which this plane is *formed*" and the individual's '*plane of consciousness*'<sup>11</sup> is formed in structures that are transmitted to the individual by others. (Leont'ev, 1981 p.57 in Tharp & Gallimore, 1991 p. 43)

The research study presented here involves two layers of educational practice. The first and basic is the actual educational practice that NQTs undergo, namely the induction project itself, which has continued for more than five years. During these years, the task of the Expert Pedagogical Mentors (EPMs) not only contains a basic dilemma but also is fraught with many contradictions. At the same time that they are

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<sup>8</sup> The Preface is an excerpt from the research diary that has accompanied me over the past years.

<sup>9</sup> Pseudonyms are used to refer to participants throughout this study.

<sup>10</sup> Newly Qualified Teacher

<sup>11</sup> Consciousness or higher cognitive process, or as I call it, '*self awareness*'

trying to help the NQTs to survive they are also trying to increase their self-awareness and advance their professional development.

The second layer is the Action research that accompanies the induction project and focuses on the reflective videotaping strategy. This encompasses all the other support cycles that will be described later, both contextually and as sources for learning and improving. I would like to emphasise at the outset that, in our case, the second layer depends heavily on the first, since educational practice is both our point of departure and our point of return. As a result, the theoretical perspectives also differ from the propositional forms prevalent in educational research, namely the theories related to educational practice, or, as termed by Whitehead, the '*living theories*' (Whitehead, 1989).

Theoretically speaking, our '*living theory*' is structured from practice, but also has points of departure from other theories such as Vygotsky's proximal zone of development (ZO-PED) and Feuerstein's special mediating methods; which I applied to adults' professional development. Contradictions exist between these layers and sometimes even within the same layer – between survival and his/her professional development; between being '*a good person*' to pupils and being strict and ensuring that no disciplinary problems occur. Contradictions also exist for the mentors – between being '*good*' to the NQTs by suggesting what they consider to be effective techniques to them, providing them with a list of '*What to do in every situation,*' to use our metaphor, giving them '*aspirins*' when they ask for it, and between not offering them ideas or solutions, waiting patiently until they themselves discover what action to take thus empowering them and helping them to advance professionally. I hope to produce concrete evidence to support the claims as verifiable knowledge claims and not wishful thinking.

My role as coordinator also involves numerous contradictions, having to make numerous decisions:

- Either involving all the EPMs in every stage of the model's development and implementation or being more centralist in terms of taking responsibility in implementing the induction policy.
- Controlling the Action research in the best and most effective way or letting it flow freely.

- Making it more authentic, accurate and realistic or enabling the participants the freedom to choose between showing the recorded lesson or not, even if it means losing foregoing information.

Throughout the entire enterprise in both the induction project, the first layer, and the Action research, the second layer; it had to be remembered that even though the immediate goal was to develop and empower the NQTs, the main goal targeted were the pupils in their classes. Therefore, this tool, the video-glasses is so suitable for this type of research, not only in our theoretical focus but also in the physical focus using the video-glasses to record pupils in lessons from the '*teacher's view-point*'.

Acting in the second layer, I, the coordinator of the project and the management team working with me, became practitioner-researchers. First of all we began to document every meeting, review literature, collect every possible data from the NQTs using it as the key to improvements in the future. In constructing cycles of support for NQTs, the direction of the process has always been from '*practicum to theory and back to practicum*' (Zilberstein, Ben-Perez, 1998). In the following study I would like to offer a progress report of my own involvement, as an aspect of my own accountability, and check the contribution to teacher education.

The professional review of literature introduced me to theoreticians like Vygotsky and Feurstein and to new ways of organizing knowledge like Vonk's professional development dimension model, Van-Manen's reflective levels, Schon's focus on the '*time of reflection*' and Fuller's description about *teachers' concerns*.

The main *personal questions* evolving from the practical layer can be expressed in the following way.

1. Regarding the NQT:
  - a. How can I survive in the new system?
  - b. How can I improve what I am doing?
2. Regarding the professional mentors, the EPMs:
  - a. How can we meet the many contradicting expectations of NQTs?
  - b. How can we improve what we are doing?

The second layer, the research enquiry has already undergone four phases<sup>12</sup>. The first phase was described in the educational policy unit '*The Induction Project in Israel – Implementing a New Policy*'. The second phase was conducted at the end of the

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<sup>12</sup> See diagram no. 2

educational research unit '*Planning an Action Research*'. The third was explored in the educational management unit, by describing the '*Team Management*'. The fourth phase was the pilot study, concentrating on the promotion of professional self-awareness of NQTs, using the strategy of reflection with the help of video-glasses<sup>13</sup>. Now, in the fifth phase, the research enquiry, we continue to promote self-awareness and concentrate on enhancing dimensions of professional development (PD); using the structure, framework and research tools that emerged from the pilot study.

The research enquiry described in the following chapters attempts to clarify '*patches*<sup>14</sup> of profession', explore ways to promote self-awareness and analyse professional development of NQTs.

The main purpose here is to explore educational situations<sup>15</sup> with the help of an innovative strategy, reflecting on lessons recorded with video glasses. Five aspects of educational research are dealt with:

**Time** – a special year, the first year of teaching – a professional ZO-PED<sup>16</sup>.

**Tool** - an innovative technology, the video-glasses.

**Methodology** – an Action research with a hermeneutic<sup>17</sup> way of interpretation.

**Reflective Monologue** – the first stage to promoting self-awareness.

**Reflective Dialogue** – mediating reflection for NQTs, bridging the ZO-PED.

Underpinning the overall process are my own beliefs and values that pervade every aspect and have no doubt evolved as a result of my professional experience as a teacher for over 20 years. Being the induction coordinator during the past four years has brought me closer to the world of NQTs. The theoretical framework for reflection adopted here depends upon the underlying assumptions about teaching and teacher education, which are outlined in some detail in the next two chapters. These assumptions are themselves premised on other assumptions about the nature of knowledge, its acquisition, and its use:

- That knowledge is constructive and individual.
- That questions do not always have concrete and general answers.
- That practicalities of everyday teaching are very complex.
- That answers tend to be created from within the practice.

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<sup>13</sup> See appendix 1 – Description of the Tool (Video glasses)

<sup>14</sup> Term borrowed from new theories about desert ecology, meaning that situations are small worlds

<sup>15</sup> We call every short case - an Event

<sup>16</sup> A term explained in the first page after the cover sheet

<sup>17</sup> Explained in chapter 4.

- That practice occurs within the context of real professional life.

Several levels of reflection<sup>18</sup> are described in this study, but particular emphasis is on ‘critical reflection’<sup>19</sup>. The critical approach requires teachers to use ethical and moral reasoning.<sup>20</sup> The rationale of the study is to explore the promotion of ‘self-awareness’ of NQTs and through it to gain insight into their PD (Professional Development). It examines ways of making tacit knowledge of teachers explicit.

“The process of interpreting and personalizing theory and integrating it into conceptual frameworks that are themselves partly inconsistent and partly tacit is as yet only minimally understood”. (Eraut, 1994; p.157)

Numerous research studies (Hacohen, 1997; Ben-Perez, 1998) showed that teachers have two types of knowledge: tacit knowledge and explicit knowledge. The studies also mentioned the ‘iceberg phenomenon’, whereby explicit knowledge is only a small part of the teacher’s overall knowledge, similar to the iceberg where only a small part is visible above the water surface and the majority is invisible, buried beneath it.

In our context in Israel<sup>21</sup>, we are only beginning to appreciate and value qualitative research and Action research methods. The practice of education worldwide has also changed:

“Frederick Taylor’s time and motion orientation for studying the behavior of factory workers was employed as a general model of thinking about the teaching practices of teachers. A pseudo kind of science began to emerge and was found attractive by many school administrators who saw in it a way to appear up-to-date” (Eisner, 2001; p.25).

A new and different method is presented here that tries to understand the teaching activities of NQTs, by emphasising reflective processes in their way of thinking. My main dilemma was how to present the circular process in which we moved from a situation of ambiguity to a situation of greater clarity and explicitness; trying to produce a text that combines scientific accuracy with excitement, sensitivity and sensuality that are characteristic of more artistic, literary writing. I tried to enhance openness, open-

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<sup>18</sup> Including my reflective diary, I’ll use partly in the footnotes and partly in the concluding section.

<sup>19</sup> See terms indicated in the first page after the table of contents.

<sup>20</sup> Can NQTs with the help of reflective videotaping strategy achieve that level of critical reflection?

<sup>21</sup> More details about the context will follow in chapter 3.



mindfulness and provide a supportive environment as principles of procedures during the research. It is also a call for serious reflection on the nature of professional education; for everyone interested in the debate about the kind of teaching profession we want to enhance.

The induction year is a special year, having extensive contexts in terms of the training period prior to it and the subsequent long period of continued PD. Induction brings a shift in role orientation and an epistemological move from knowing '*about*' teaching to knowing '*how*' to teach. It was logically expected that experiences accompanied by mediated instruction could promote and sharpen the differences between '*doing teaching*' and '*being a teacher*'

Good documentation is the key to a rich and full description of events. We used a sophisticated technology – the Video-glasses as a basic tool. The richer the description and the greater the detail, the better the chances were for attaining an interesting, didactic monologues and dialogues.

We started with some theoretical perspectives (Vygotsky, 1986; Feurstein, 1998) and which we hoped to enlarge and '*ground*'. It was carried out whilst revealing the nature of the reflection phenomenon and observing all of its levels and aspects as they occurred in real time and on the real spot.

Before I continue, some limitations should be considered. The accepted factors in a qualitative research for examining reliability differ from those used in positivist research. A qualitative constructivist research (Whitehead, 1989) as is presented here, seeks reliability by pointing to personal responsibility, the ethics of concern, majority votes in a text, and triangulation with different sources of data.

Other limitations are connected with the need to overcome obstacles of working with a new technology. I had also to face my own limitations: English, being my second language, makes it difficult to express all the professional and educational nuances.

The cultural context raised another type of limitation. I was not sure that I could make the readers of the study fully aware of the different cultural and educational contexts that the enquiry relates to. An additional limitation was caused by the large quantity of data and the fact that many events and items were left out because the NQTs did not choose to reflect on them<sup>22</sup>.

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<sup>22</sup> In chapter 5, with the analysing of the data, I will present more details about the data not included.

The research questions of the fourth phase, the pilot study, emerged from the preliminary phases were:

- How many levels and stages of reflection can be defined?
- How can mediated instruction enhance levels of NQTs' reflection?
- What can experts also learn from the NQTs reflecting with this strategy?
- What patterns and components can be described in this process?

While conducting the pilot, new questions were formulated. The research questions in the present phase, the Research Enquiry, are organized in two sections, aims and objectives:

1. **Aim** – To explore how reflection with the help of video glasses can promote and improve self-awareness of NQTs.
2. **Objectives** –
  - What dimensions of PD evolve in the process of passing from the '*threshold stage*' to the '*stage of growing into the profession*'?
  - How can '*tacit knowledge*' become explicit?
  - How can '*mediation*' be enhanced, using the strategy of video-glasses?

After answering these questions, explaining the patterns and components that emerged from the analysis, I'll describe the possible shift in '*teachers concerns*', and emphasise the main contribution of the study to practice, and to theory.

The intention of the pilot study was to explore the first '*glimpse*' into the way of acting and thinking of NQTs; identify stages of reflection and become acquainted with the new instrument, developing a framework for collecting and analysing data, a procedure that now is used in the main study. As in other cases of quality research, the questions may still be modified. It will be recommended for future research.

The study describes how the participatory research relationships help to illuminate this mediated critical reflection both for the NQTs and the EPMs. The professional self-awareness of the participants was enhanced and they examined new possibilities for pedagogical improvement<sup>23</sup>.

The focus is on the year of transition from '*threshold stage*' to the '*stage of growing into the profession*'; examining in the background a continuum of the process of NQTs' professional development, even before becoming student teachers, from their early days

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<sup>23</sup> As a result it affected the immediate NQTs' professional practice in their classrooms.

at school as pupils, to college years, through the induction period, and to life-long learning and self-directed professionals<sup>24</sup>.

The pedagogical and professional development of teachers as seen in their instructional decision-making, can be described in five stages: novice, advanced beginner, competent, proficient and expert (Berliner, 1986; Eraut, 1994). The debate in our research is focused only on the first stage. This special induction year is treated in this research enquiry as the proximal zone (ZO-PED) of a teachers' PD<sup>25</sup>.

After introducing the theoretical perspective, and reviewing literature in chapter 2, the background and context will be described in detail in chapter 3. In chapter 4 there is an explanation on the specific methodology and method.

Chapter 5 will set out the findings after the analysis of data. With the help of many examples and hermeneutic interpretations, the different categories of the professional development dimensions will be discussed practically and theoretically. In the Discussion chapter the findings will be gathered in a simple matrix. The last parts, the Conclusion and my reflection on the study will lead back to the theoretical perspectives '*ground the research*' by expanding the theories and explaining the knowledge we gained. That search for understanding NQTs' reflection in their first year, is set within the broader landscape of teacher education in general, suggesting ways to support programs to maximize the further professional development of new teachers.

The basic purpose was to encourage NQTs to reflect '*on action*' and empower them to do it '*in action*' as well (Schon, 1987), to develop their critical pedagogy skills by developing their self-awareness, and settle them on a rich professional way with an enlarged teaching repertoire.

In a climate of uncertainty educators are challenged to participate more actively in shaping educational theory and practice. In times of change, the NQTs can, at least in some respects transformed into a relative expert alongside established members of the profession or even experts. My first reflections and self-awareness of the theoretical perspectives will be described in the next chapter, in some of the footnotes and in the concluding section.

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<sup>24</sup> See the stairs in figure 1 – Stages in professional development of teachers.

<sup>25</sup> Based on Vygotsky's theory (Kozulin, 1999).

## 2. Theoretical Perspectives and Literature Review

The need for a reflective teacher education has been argued on the grounds that it subjects the expertise of teachers to critical evaluation and enables them to take a more active role in their professional development (Calderhead, 1988). The development of skills, habits and self-awareness of reflection may be seen both as means of improving teaching activities and as an end in itself, a valid outcome of reflective teacher education (LaBoskey, 1993).

Given the importance attached to the development of reflective teachers, it is not surprising that a range of teaching tools for this purpose emerged in the literature. Reflective journals, reflective dialogues and reflective interviews and others such techniques have been advocated by educators as means of stimulating reflective thinking. Despite the popularity and prevalence of this technique, the theoretical and empirical bases supporting its use are as yet under-developed.

The principal influences on our theoretical perspectives were derived from Vygotsky and Feuerstein, but the literature enlightened us with more perspectives. Schon and Whitehead (1989) among them. Schon, holding to the propositional form of theory explains:

A theory is not necessarily accepted, good, or true; it is only a set of interconnected propositions that have the same referent - the subject of the theory...

Theories are vehicles for explanation, prediction, explanatory theory explains events by setting forth propositions from which these events may be inferred, a predictive theory sets forth propositions from which inferences about future events may be made, and a theory of control describes the conditions under which events of a certain kind may be made to occur. In each case, the theory has an 'if...then....' form." (Argyris & Schön, 1975)<sup>26</sup>.

Whitehead argues that this propositional form is masking the living form and content of an educational theory, which can generate valid descriptions and explanations for the educational development of individuals. He is arguing for a reconstruction of educational theory into a living form of question and answer, which includes propositional contributions from the traditional disciplines of education.

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<sup>26</sup> <http://www.bath.ac.uk/~edsajw>

In the following research enquiry I intend to explore a '*living form of theory*' (Whitehead, 2001). In order to find information about Action research and self- study, I want to direct the attention to the living individuals, the NQTs the EPMs supporting them, and myself as the coordinator and facilitator of the project. In the next chapter I'll describe the contexts within which such a theory is produced or expanded.

The living theory that I refer to is based on and emerges from propositional forms of understanding like the Vigotzkian theory and his way to explain and understand the '*proximal zone of development*', the ZO-PED, or Feurstein's special meaning for mediation and dialectical dialogue. We conducted the dialogues with open eyes, looking for professional dimensions that can be improved. Starting from this ground I'll investigate the content and components of the living form of theory that can generate valid descriptions, explanations and interpretations for the educational and professional development of NQTs.

In developing such an approach I have had to plan and change many times the cycles of reflection, listen to what the NQTs told us about their stimulated recall and their reflection on teaching/learning activities. Only after more than two years the present method came into shape and the research questions became clear.

It is an enquiry that first of all asks questions such as "How do I improve this process of education here?" (Whitehead, 1989; 1999) but before we are going to improve, in our case, we have to be aware of the situation by investigating two preliminary questions: "How do we promote self-awareness of NQTs?" We want the NQTs to be '*proactive*'<sup>27</sup> in their learning about their teaching. The second preliminary question regards the EPMs asking: 'How do we better understand and empower professional development of NQTs?'

These two questions are the core of the research enquiry and has been explored from different perspectives:

- a. The NQTs' perspective as they declare it or reflect on it.
- b. The expert pedagogical mentors, including me, supporting those NQTs.
- c. My other perspective as a researcher, connecting practice to theory and theory to practice, documenting, analysing, discussing and concluding in a systematic way; relating to validity and generalisability on the way of generating a living form of theory.

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<sup>27</sup> Take responsibility on their teaching activities.

Although much has been written from both theoretical and empirical perspective regarding the reflective potential of teacher's professional development, novice teachers' point of view has received less attention.

As for the knowledge of teachers, the explicit and the tacit, the literature<sup>28</sup> emphasises the '*iceberg phenomenon*' whereby explicit knowledge is only a small part of the teacher's overall knowledge, similar to the iceberg where only a small part is visible above the water surface and the majority is invisible, buried beneath it, like the tacit knowledge that exists but not on the surface. I will try to listen carefully to what they had to say about every event that they chose to reflect on, and by this be witness to their tacit knowledge becoming more open and explicit.

Arguments for reflections on case studies stem from theoretical and empirical perspectives on the social and situated nature of cognition (Shulman J. 1992). According to these arguments, if knowledge is situated in social contexts, then learning about teaching and teachers professional development (PD) should also be situated in sites of teaching and learning – the ecology of classrooms characterized by ambiguity and uncertainty (Shulman J. 1992; Richardson, 1995).

## **2.1 Professional Development**

Valli (1992) claims that the current thinking about professional development of teachers in the field, represent programs which treat reflection as an important and complex construct. Hatton & Smith (1995) found the following principles across at least a number of programs:

1. Concerns with the development in student teachers of a personal style and philosophy of teaching, including ethical dimensions.
2. Use of Action research or enquiry based approaches to investigate and improve teaching in a supportive environment.
3. Recognition of the problematic nature of schooling, including classroom and curriculum decision-making.
4. Sensitivity to contexts for teaching, and in particular, to the range of school students' backgrounds, abilities and characteristics.
5. Attempts to build in cycles involving preparations for practicum action, data collection about what happened, reflection upon it, and possible (often 'if-then') modifications.
6. Ongoing monitoring of program implementation, with careful attempts to provide some evidence of their outcomes and impact.

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<sup>28</sup> See Hacohen (1997) and Elbaz (1983)

7. Use of techniques such as microteaching to build a repertoire of skills, journaling to encourage recording, thinking and self-evaluation, and regular dialogues with peers, staff and/or teachers to clarify issues and value positions.  
(Hatton & Smith, 1995; p.44)

### **2.1.1 Through Time**

The teaching profession is currently under discussion. Next to the status of the profession and the role of the teacher in the educational enterprise, the quality of teaching, the process of teachers' professional development and the strategies influencing these processes are also central issues.

Teacher induction, the first year of employment as a teacher, can be seen as a transition stage from being a student to becoming a teacher. Induction brings a shift in role orientation and an epistemological move from knowing *about* teaching to knowing *how* to teach by confronting the day-to-day challenges. Perhaps good supervision could sharpen the differences between *doing teaching* and *being a teacher*?

“Becoming a teacher involves forming a professional identity and constructing a professional practice. Both aspects of learning to teach must unfold in ways that strengthen the beginning teacher's capacity for further growth” (Feinman-Nemser, 2000 p. 12).

As mentioned before the pedagogical and professional development of teachers can be described in five stages: novice, advanced beginner, competent, proficient and expert (Berliner, 1986; Eraut, 1994). The debate in our research will focus on the first stage only – the induction stage for novice teachers.

#### Newly Qualified Teachers: novice - beginning to teach

We can look at a continuum of the process of a NQT's professional development, even before he is a student teacher, from the early days of being a pupil, to initial training, to induction, and to life-long learning and self-directed professional development.

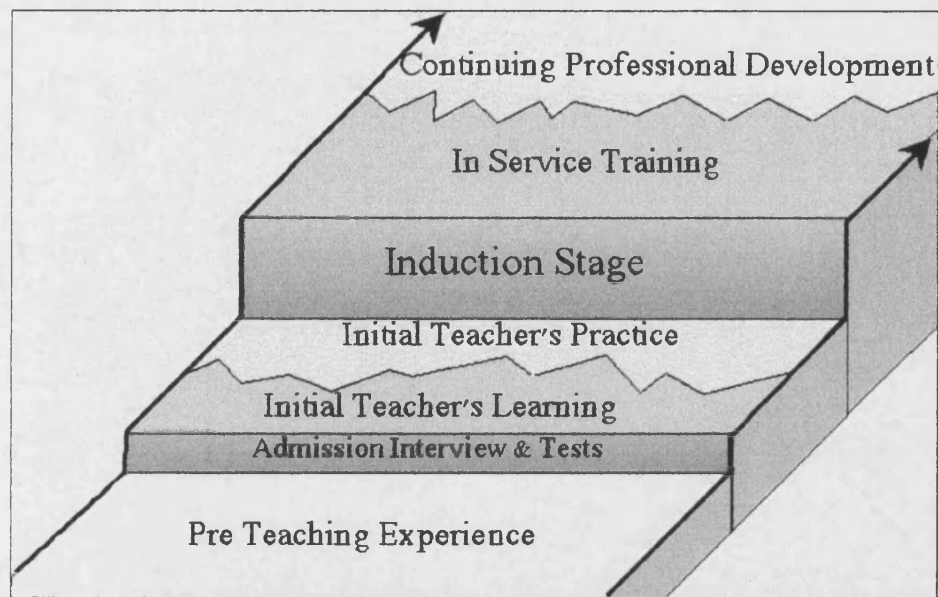


Figure 1- Stages in professional development of teachers

Initial teacher learning and practice is aimed at developing teachers' starting competencies. The induction stage is aimed at helping novices develop a professional identity and an appropriate repertoire of actions and action insights, and finally structure their self-awareness and self-directed professional development. A good start should definitely influence a teacher's abilities and willingness to develop in a positive direction. From studies (Grossman, 1992; Pope, 1993; Berliner, 1994; Eraut, 1994) on teacher's professional development, we know that teachers who have been left to fend for themselves in their first years of teaching tend to develop a strongly '*survival-oriented*' repertoire of actions, sometimes called a '*survival kit*'. This result in a '*trial and error*' approach because of the pressure brought on by circumstances. Due to time constraints, beginning teachers hardly find time for reflection, and when they do, they lack a solid orientation base since they do not know what to reflect on.

### 2.1.2 In Dimensions

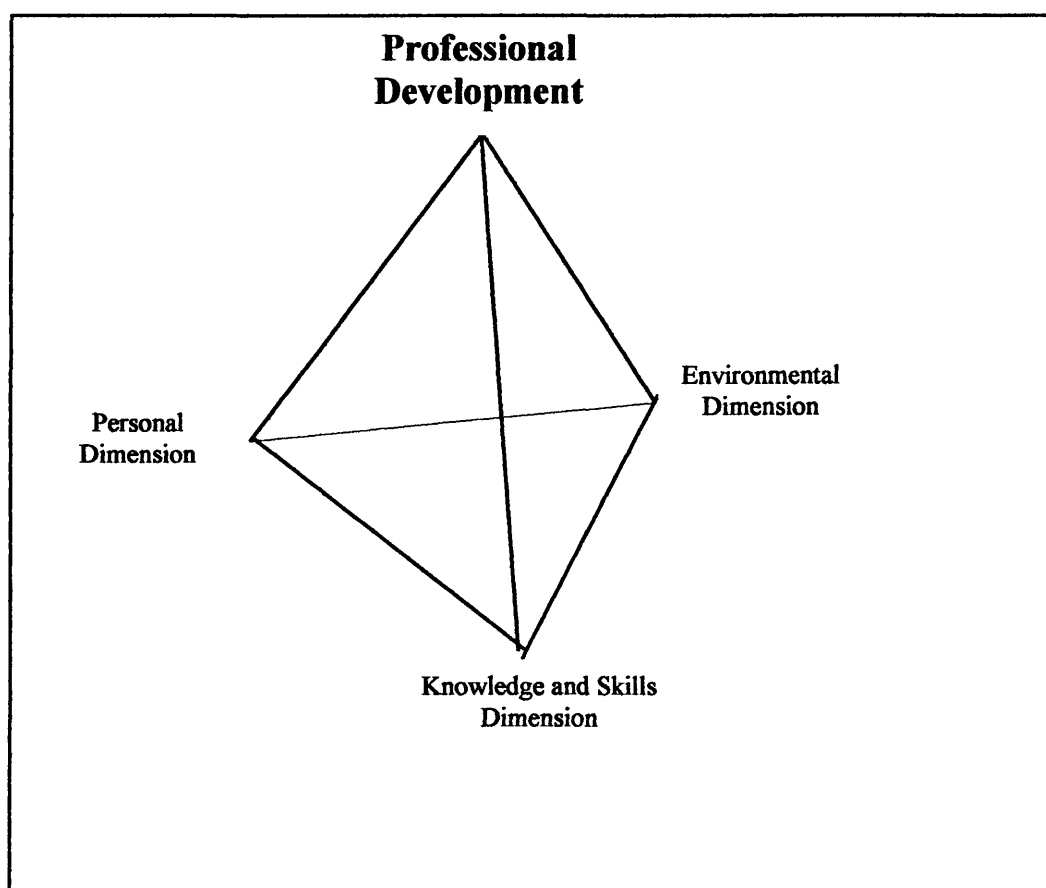
Another theoretical perspective helps to understand the complex that NQTs confront; the three dimensions of professional development that Vonk found in a series



of enquiries between 1993 and 1997. We can also observe the professional development of teachers in three dimensions that are separated from one another in the beginning' and as time passes by, they turn into one integrated professional personality. Vonk (1993) assumes that teachers are self-directed professionals. He adopts the formalised mentor-protégé relationship as the starting point, and the individual teacher's professional development as the organising principle for the induction of teachers into the profession.

“The essential elements of a mentor's knowledge base are described as the dimensions in the process of beginning teacher's professional development, which include the personal dimension, environmental dimension, and knowledge and skills dimension” (Vonk, 1993 p. 28).

Figure 2: Conceptualisation of NQTs' professional development (Source -Vonk 1993)



### The Personal Dimension

In teaching-learning situations, the teacher uses himself as a means. Therefore, in education, the teacher as a person is always at issue. Many beginners experience this as frightening and stressful. Since the majority of the NQTs are still in the transition stage

from adolescence to adulthood, becoming a teacher for many of them means growing to maturity under high pressure. They must develop self-awareness and a new perspective on themselves - '*Selves as teachers*,' and learn to develop professionally. In the beginning, many young teachers do not have the slightest idea, for example, how they will behave under environmental pressure or in situations of great stress. They are so self-concerned, survival-oriented, that they hardly make a distinction between problems that originate from them being in a transition stage and those that originate from the organization. As a consequence, they tend to either blame themselves or the organization for all the failures they experience. All in all, they lack experience in this regard and must therefore develop new behaviours to cope with these situations, and must sometimes even adjust their self-image.

“Mentoring in this context is in particular concerned with helping the novices develop a clear perspective on themselves and their situation” (Vonk, 1995 p. 18).

#### Knowledge and Skills Dimension

During the four years of college education, in their pre-service studies, student teachers acquire knowledge and skills but part of them are not relevant because they are not acting as real teachers. If they teach, for example, they do it in another teacher's class, the one that trains him/her in practice. The professional knowledge and skills NQTs must develop further along three sub-dimensions: pedagogical content knowledge, classroom management skills and teaching skills.

“Many novices have to make the change from identifying themselves with the pupil role to that of the teacher's role. This process of reorientation is often accompanied by feelings of uncertainty and stress. Furthermore, the organization and physical resources of a school, and perhaps more significantly the beliefs that are not only held and valued within the institution (written rule pattern) but have become embedded within its many taken-for-granted practices (unwritten rules), inevitably exert a powerful influence upon the novice teacher” (Calderhead, 1992 p. 23)

#### The Ecological Dimension

The situation of the beginning teacher in school is characterized by a confrontation with new responsibilities: from the first day and the first lesson on, beginners have

exactly the same responsibility for the classes they teach as teachers who have been teaching for 10 years. They must deal with expectations concerning the ways in which they function with respect to their colleagues, the school management, the pupils and the parents.

“Novices are supposed to meet these expectations; however, they do not precisely know what the expectations are and if they discover them they do not know how to cope. The school environment in which various teaching cultures exist: each school and each department has its own set of written and unwritten rules” (Hargreaves, 1992 p. 5).

The objective of this research is to investigate several dimensions of teachers’ professional development as they promote their self-awareness and express their reflective thinking ‘*aloud*’ about their work. The rationale behind this objective is founded on the basic assumption that teachers continue to learn from their own experience, and do so better if they are aware of the process; and if possible, while conducting a dialogue with expert mentors mediating the different levels of the reflective activity. But what is the best time to educate teachers and make them responsible for their professional development? During pre-service or when they are in-service? When do they have the ability to see alternative ways of examining and understanding professional work? Those questions led me to seek for a developmental theory that can reframe and organize a new way of understanding.

## **2.2 Vygotsky and the ZO-PED**

It took half a century for the majority of psychologists, particularly in the United States, to move away from the simplistic ideas of behaviorism, to accept the notion of information processing, and then to begin questioning the limits of the applicability of the information-processing model to human language and thinking.

“Taking into account this step-by-step rediscovery of Vygotsky’s works, it becomes clear that they should not be treated as an artefact of the past, but rather as still incompletely understood blueprints for the future of psychology. After all, Vygotsky only sketched out a theory of cultural psychology, and it is our task to develop it into a viable intellectual perspective” (Kozulin, 1999 p. 19).

Socio-cultural theories provide a particular useful framework for studying teacher thinking about teaching while engaged in case discussions because they focus on the social nature of teaching/learning activities by positing that the individual and the social are '*mutually constitutive elements of a single interacting system*' (Smagorinsky, 1995). A neo-Vygotskian perspective suggests that learning involves the use of cultural and symbolic tools such as language, text and experience to develop understanding of the subject under study, while engaged in particular activities in particular environments<sup>29</sup>. These tools can range from the concrete to abstract, from monologues to dialogues, experience; or theory, discourse and ideology.

Learning to teach involves more than learning a variety of strategies, techniques or methods, although these too are tools for appropriating understandings of the world of classrooms and schools. Our focusing on tools for mediating thinking and reflecting emphasizes the generative and contextual nature of learning.

As teachers use tools such as language, experience and detailed information, they generate new understandings – or images and issues – that reshape the tools they have used. Thus, tools can be seen as being both generative of issues and images and reconstructed by them. Images, and in our particular case, video-tapes, can be a kind of organizing framework - or tool – for thinking about teaching and reflecting on it (Clandinin & Connelly, 1995). Consequently, images generated by particular tools can in turn become tools for thinking and learning.

Psychological development can be seen as the transition from natural forms of behaviour to higher mental functions having a mediated structure. This structure is shaped by the use of signs, symbols and language, which serve as mediators of different degrees of complexity. The theory presupposes the existence of three planes of development: anthropogenesis, historical development and a development that causes individual acquisition of higher mental functions. In each case, the change in psychological processes is related to the change in the socio-cultural type of mediation. Vygotsky's theory was based on a number of interlocking concepts, such as the notion of higher mental processes, the notion of mediated activity, and the notion of psychological tools. According to Vygotsky, human higher mental processes are functions of mediated activity.

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<sup>29</sup> This term is used now more as the ecological dimension.

“Development is therefore not an unfolding or maturation of pre-existing ‘ideas’; on the contrary, it is the formation of such ideas - out of what originally was not an idea - in the course of socially meaningful activity” (Kozulin, 1999 p.25)

Can true advancement in teacher’s reasoning be operationalised as a difference between the teacher’s independent performance and his or her performance in cooperation with an expert supervisor? Vygotsky called the development potential reflected in this difference the ‘*zone of proximal development*’ (ZO-PED).

### **2.3 Mediation and Teaching/Learning Activities**

“The ordeals and stresses of the first year of teaching have often been cited as reasons why many new teachers become discouraged and even abandon their teaching careers. One strategy that has proven successful in providing support to novice teachers is to match them with experienced mentors, in order to ease their induction into teaching” (Vonk, 1993 p.12).

In this Research Enquiry the NQTs will not only meet with experienced teachers in the field, but also become familiarized with the reflective videotaping learning strategy using video glasses, and receive support from an EPM from the college through mediating reflection at a higher level than what they could achieve on their own.

Mediating reflection, just like mediating learning, is a type of interaction that accompanies teachers and significantly shapes their professional development (Feuerstein, 1998). An important characteristic of the quality of mediating interaction is that the mediation is not necessarily verbal or language-dependent. All of the interaction modalities may possess mediating learning qualities: movement interaction, exposure to behaviour, imitating models, and of course, verbal interaction that has a significant and special quality. In the present research we will conduct a mediating dialogue.

The assumptions of this research will be based on Vygotsky’s social theory (Kozulin, 1999) and Feuerstein’s (1998) structural cognitive ‘*ability to change*’ theory. According to Vygotsky, realising developmental potential depends on an individual’s experience in using social interaction with someone who is more skilled and experienced than him. According to Feuerstein, as a result of an individual’s experience in using mediating teaching, he can change during the learning process, become self-aware and be able to think about his learning process. Combining both these theories enables

providing a definition of the expert mentor (EPM) who knows how to mediate, being a more experienced individual; he can help realise the developmental potential of the NQTs. A sort of integration between Vygotsky and Feuerstein's theories provided the basis for this research enquiry.

The mediating interaction is comprised of two groups of parameters. The first group includes parameters responsible for the universal character of the phenomenon of human change and the plasticity characterising man as an individual. This group, comprising three parameters, is essential for the interaction with a mediating quality that takes place (Feuerstein, 1998). The second group includes parameters directing the ability to change into different directions, which are dependent on culture and interpersonal variability. We will deal primarily with this second set of parameters that are responsible for the differences in the mediating interaction.

Mediation is an activity that is generative of higher mental processes. The source of mediation is either in a material tool, in a system of symbols, or in the behavior of another human being<sup>30</sup>. Vygotsky paid particular attention to semiotic mediators, from simple signs to complex semiotic systems such as literary works that act as '*psychological tools*' in transforming natural impulses into higher mental processes.

One aspect of these developments is the transformation of unmediated; impulsive behavior aimed at a desired object into '*instrumental*' behavior mediated by a material tool – in our case, the video-glasses. Vygotsky pursued this line of reasoning in his discussion of the similarity and difference between instrumental behavior in apes, and the behavior of human infants.

Vygotsky himself warned that parallels between material and symbolic tools should be drawn with the utmost caution. The only reliable foundation for such an analogy is the mediating nature of both instrumental and symbolic actions that have the power to lead to action insights.

“Whereas in instrumental action the tool mediates human action directed at nature, in the symbolic act a psychological tool mediates man's own psychological processes: The most essential feature distinguishing the psychological tool from the technical tool, is that it directs the mind and behaviour whereas the technical tool, which is also inserted as an intermediate link between human activity and the external object, is directed toward producing one or another set of changes in the object itself. The mastery of nature and the mastery of behaviour are mutually

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<sup>30</sup> See appendix 3 – Feuerstein Schema of Mediation

related, [because] in the course of man's transformation of nature, his own nature changes as well" (Kozulin, 1999 p.91).

## 2.4 Reflective Teaching and Critical Pedagogy

Reflection is one of the most common and complex activities that teachers do during their professional lives. An ambiguity and non-uniformity also exist regarding the definition of characteristics and types of reflection, levels of reflection, criteria for evaluating reflection and an awareness to the reflective process.

Reflective processes in teaching have been afforded considerable attention by numerous researchers, especially over the past 15 years (Schon, 1987; Burden, 1990; Grossman, 1992; Hargreaves, 1992; Solas, 1992; Pope, 1993; Calderhead, 1993, 1996; Eraut, 1994; Fang, 1996; Feinman-Nemser, 2000; Whitehead, 2001). Educational and teacher training systems are required to establish teaching on a professional basis, enabling the fostering of reflective abilities, self-awareness and the development of independent teaching/learning skills.

The idea is '*action insight*' which is related to judgment and experience. A considerable amount of knowledge accumulates in the field; Hargreaves (1992) calls this '*creating knowledge*'. Today, it is still not possible to transfer this knowledge in an orderly fashion to future generations of teachers.

How can we bridge the knowledge accumulated in the field with the body of knowledge of teaching/learning?

The universal character of the phenomenon of human change is expressed here as a basis for professional development. Empirical research on what reflection on cases actually mean for teacher thinking is needed, particularly on levels of reflection (Van-Manen, 1977; Levin, 1995) and their potential to empower PD. For this study I reviewed different approaches, including hierarchical structure based on Van-Manen's (1991) classification of the level and type of reflection engaged in, ranging from technical and practical issues of teaching activities to a critical examination of social/ethical issues; and schemes designed for a more sophisticated reflection, ranging from description to complex analysis. Valli (1992) like Van-Manen suggests that the '*sociological*' approach in which evidence of the expanding scope or content of enquiry is considered the most important indicator of high level reflection, while in our case, we use a more '*psychological*' approach in which the complexity of *self-awareness* and *professional development* are considered most important. We sought to reveal the NQTs *self-*

*awareness* and thus to analyse and understand how teachers think and reason about teaching via the strategy of video-glasses, and finally to explore dimensions of NQTs *professional development*.

#### **2.4.1 Models of reflection**

Several models of reflection have been developed over the past century. These models primarily deal with identifying and solving practical/professional problems that have been brought up by teachers. The most prominent ones include the following:

##### **Thinking Cycle According to Dewey (1910)**

1. Feeling of difficulty
2. Locating and defining the difficulty
3. Recommending a possible solution
4. Judging the significance of the recommendation

##### **Learning Cycle According to Kolav (1984)**

1. Experiencing
2. Observing
3. Analysing
4. Planning the implementation

##### **Time of Reflection - Schon (1987)**

1. Reflection in action
2. Reflection on action

##### **Research Cycle in an Action Research According to Hacoheh (1997)**

1. Planning the action
2. Implementing the action
3. Collecting and analysing data - observations and reflection
4. Introducing the change - solve the problem or difficulty
5. Deciding about expanding or providing greater focus

##### **Five-point Level of Reflection Scale – Bain J. D. et al (1999)**

1. Reporting
2. Responding



3. Relating
4. Reasoning
5. Reconstructing

The interest in reflective teaching changed significantly in the early 1970s with the development of qualitative research orientation to the study of teacher thinking. Until then, the teacher's role was purely applied and related to his work as a decision-maker and supplier of disciplinary knowledge. Research studies about a teacher's behaviour was principally product-oriented and not process-oriented. Only in the past 20 years processes became the focal point of investigations of teaching activities.

According to Schon (1983, 1987) there are forms of professional knowledge, which are tacit but essential for the exercise of professional judgment and decision-making. Such knowledge can be found in professional action, and may be developed by reflection-in-action. In this respect, reflection-in-action is defined as focusing "interactively on the outcomes of action, the action itself, and the intuitive knowledge implicit in the action".

Can thinking no longer be separated from doing? Can we perceive them as one process? Shulman (1992) challenged Schon's binary approach consisting of professional knowledge and technical rationality, which characterise the latter as a negative force. Fenstermacher (1988) also sees problems with Schon's use of a '*new epistemology of practice*' and his definition of research. Furthermore, Zeichner (1992) and Van Manen (1990) are concerned that teachers may not have the time to engage in reflection the way Schon envisions it. Eraut, on the other hand says:

"Professional learning continues both on and off the job: in action, in discussion and in periods of personal reflection. Most of it is unplanned, even personal reflection taking place more in unplanned moments - when driving to work, talking to a friend or having a bath - than in periods deliberately set aside for the purpose. (Eraut, 1994; p. 75).

The concept of teacher reflection became widely accepted in teacher education circles in the 1980s. The idea was that teachers as professionals should be responsible for their actions, and that teacher training should "transcend mere training in the use of specific behavioral competencies" (Korthagen, 1993). Likewise, Kincheloe & Steinberg (1993) argued that there is a need for teacher reflection so that teachers have a chance to conceptualise the moral, ethical and cognitive aspects of teaching and not become technicians isolated from their context (Korthagen and Russell, 1999). In addition,

scholars advanced the idea that teachers should observe the relationships between theories as well as between thinking and acting. Moreover, the way one views teaching also influences whether or not and how teachers should reflect (Kincheloe & Steinberg, 1993; Zeichner, 1994).

Researchers in the University of Utrecht's teacher education program have been especially active in this area. In 1985, Korthagen developed a model of reflection he defined as ALACT that is based on earlier work by Miller, Galanter, and Pribham (1960) and Skemp (1979). The name is actually an acronym for the stages of this reflective model: Act, Look back, Awareness of essential aspects, Create alternatives and Trial. The model is circular, as the fifth and last stage is a repetition of the first.

Korthagen (1993) proposed that greater attention be paid to non-rational and non-linear modes of reflection. He agreed with a growing number of educators and researchers that strictly logical thinking is not the most appropriate tool for solving the problems that teachers confront in the classroom (Eisner, 2001). The growing knowledge base of teaching indicated that teaching is more complex than what was previously assumed.

Balancing rational and non-rational reflection would address these issues, the advantages being that teachers get a multiple-sided view of teaching, are able to connect theory to practice, and are able to be rational and creative simultaneously. These goals could be achieved by using techniques such as mirroring, the use of metaphors, drawings or photographs, and guided fantasies (Korthagen, 1993). As a result, reflection would focus more on the teacher's individuality.

As in many other cases dealing with human behavior, it is a situation of Gestalt which is a configuration referring to the process of integrating a series of detailed perceptions into a complete experience or meaningful image that is more than the sum of its parts. To ask for what is wanted or to express the feelings of the NQTs may well be enough to complete the Gestalt. Alternatively, to find some more creative and new ways of dealing with complicated situations would leave the individual teacher free to give his attention to new situations as well. This kind of teaching and reflecting on teaching activities has the best potential to enlarge the repertoire of NQTs more efficiently.

## Levels in the Process of Learning

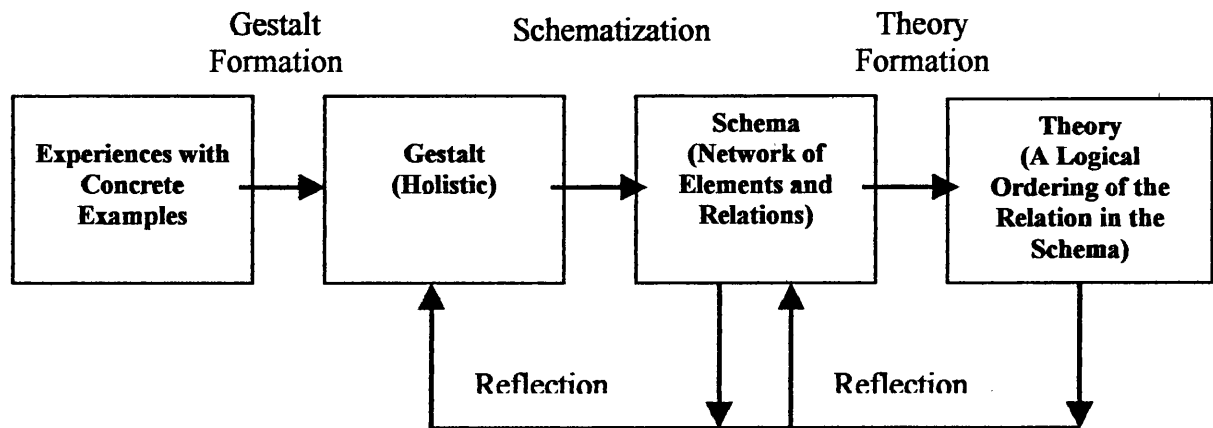


Figure 3 - Levels in the process of learning - Source: Korthagen, F.A.J.F. Kessely, J.P.A.M. (1999) p.10

I will focus in particular on the reflective part of this model, determining what schemes evolve and what field living theory grows out of these processes. The key factor will be '*self-awareness*'.

The emphasis of Gestalt on learning by discovery from direct experience makes it exciting, but is sometimes confronting and painful. We will try to create here, with the help of the innovative tool, the video-glasses, an environment indirectly affecting the teacher's '*self-awareness*' and willingness to improve, encouraging him to engage in the thinking process, the essence of which is the internal appreciation causing him to want to change on his own free will. In doing so we have to take into account the background and context of the induction project and the Action research that accompanies it.

From this rich literature and theoretical perspectives we will proceed to explore and understand the background and the context of this research enquiry.

### 3. The Background and Context

Teaching/learning activities are contextually bounded, shaped by the purpose, situation, as well as by the configuration of people in the learning setting as captured by the video-glasses. Russell defines an '*activity network*' as:

“...Any ongoing, object-directed, historically conditioned, tool-mediated human interaction: a social club, a political movement, a course of study, a discipline, a family, a profession etc.” (Russel, 1996; p. 1)

More than twenty years ago, Fuller (1975) described the first year of teaching as if it was today: “Becoming a teacher is complex, stressful, intimate, and largely covert...”(Fuller & Bown, 1975 p. 25) Can we make it more visible? Can we uncover part of it?

Teaching as conceived in Israel is simply incredible, unexpectedly demanding. Many new teachers feel they look even worse than they really are. The job of educating teachers is enormously complex.

#### 3.1 Teacher Education in Israel

The Israeli educational system was, and has always been, determined centrally. This means that the funding is determined 90% centrally, the teacher's salary and working conditions are determined by central bargaining, and most importantly regarding the induction policy discussed here, the teachers are registered. The distribution of authority has prevailed over recent years; schools are becoming autonomous and self-managed. But these phenomena are, for the most part, mere proclamations. The first half of the 1990s, when leftist (“Meretz”) ministers filled positions in the Ministry of Education, was characterised by the introduction of reform and numerous changes to the educational system. When the rightist (“Likud”) party returned to power in 1996 and the “Mavdal” conservative religious party began to play key roles in the Ministry of Education, changes were introduced – or attempts to introduce changes were made – in other directions. The following years were full of changes, moving from rightist ministers to leftist minister and back till the last two years (2002-2003).

The results of the past election exemplified the political polarisation that occurred between different social groups based on religious, national, ethnic, positional and

cultural backgrounds, and the urgent need to recognise Israeli society's pluralism as a fact. Of course, this process has a direct consequence on the issue of pluralism as opposed to statehood in educational policy, and on the social struggle regarding this issue.

Five main characteristics have had a direct impact on the cultural changes taking place in Israel and a direct consequence on the educational policy and central issues revolving around this policy:

1. Crises in centralist social ideologies: Centralist social-political ideologies that strive to create a social and cultural melting pot do not succeed in realising the potential of economic growth that is constant and common to the entire population. Frequent economic crises and increasing unemployment brought on a lack of political stability, and in the end, a decrease in the position of centralist ideologies.
2. Change in relationships between the individual and society: In the past, it was assumed in Israel that the advancement of the individual depended on the advancement of social objectives, and therefore the individual was forced to adapt to these objectives through social processes. Today, an equality prevails regarding relationships between the individual and society, as is reflected in educational policy that is based on the principle of realising the potential of every pupil as being equivalent to the social objectives of the educational system. Special emphasis must also be placed on the change in school processes, with the objective of creating reflective teaching and enabling the realisation of the individual potential of teachers and pupils. This change is not only marked by an increasing privatisation of economic and political systems but also by the public speaking style. During the State's first three decades, the mood was '*we want*' and '*we will do*' whereas today, we are hearing more '*I want*' and '*I will advance*' (Yogev, 1999).
3. An increase in the importance of public knowledge and information: Over the past decade, a rapid spread of knowledge has occurred in different fields involving innovative technologies and mass communication tools. These developments have several direct consequences on educational policy. Firstly, the spread of knowledge produced a renewed relationship to school curricula and teaching tools, and therefore contributed to the emphasis placed by educational policy on school processes, while adapting them to these changes. Secondly, an increase in the importance of knowledge resulted in a renewed growth in the public importance of the educational system, which provides tools to help the individual cope with the

accumulated knowledge and modern technologies needed to acquire this knowledge. The influence on the teaching profession is bi-polar; teachers who integrated well into the age of information progressed at a faster rate, but those who were inundated by the load of information stayed lagged behind even more.

4. Changes in social classes within society: Over the past decade, a change has occurred in the social class structure within society in Israel.

According to Yogeve (1999), “in the pyramidal structure, the elite position was narrow, the middle-class position was wider but limited, and the working class position was very wide at the pyramid’s base, which represented simple vocations. Several social and economic changes resulted in a significant expansion of the middle-class position, and in the creation of larger gaps between this class and the lower class, which represents the narrower ‘bottom’ of the barrel shape.”

In terms of Israeli educational policy, these processes raised the question of equal opportunity in education during the 1990s.

5. Social and political polarisation: This characteristic is a result of the previous four characteristics. If centralist ideology objects, and the legitimacy of group ideologies and the aspiration for personal fulfillment within a group framework increase, and if a greater distinction is made between middle- and lower-class positions, then an increase in social and political polarisation between the different groups occurs.

The position unifying these five characteristics is the feeling of social and personal chaos contributing to the current situation under conditions of uncertainty, which becomes increasingly more like a distinct characteristic of our period. This uncertainty has also characterised the Israeli educational system over the past decade, in striking contrast to educational policy during the first four decades following the establishment of the State.

According to Rachimi (1995), the academisation of teacher training means the academisation of the teaching practitioners who work in the different educational institutions, i.e. the training of all teachers working on all levels in the Israeli education system towards a B.Ed. degree in teacher education colleges. This degree is recognised for continued studies towards a second degree in education.

The academic training addresses programmes, the objective of which is to shape the image of the teacher and the educator. The real academic development is the enforcement of ‘*academic literacy*.’ This is the basic perception that must include all the realms of training – disciplinary, educational, practical: “this is the true meaning of

the term the '*academisation of teaching*,' beyond the granting of a degree or the reinforcement of a certain area of learning" (Ziv, 1996).

Yogev (1996) claims, "From the overall trend of decentralizing the authority within the Ministry of Education, an empowerment of administrative positions and teachers has started to take place. The position of head-teacher was no longer defined merely as an administrative position, but rather as a position of an '*educational leader*' on the inside in terms of managing the school staff, and on the outside in terms of his relationships with the local community and the Ministry of Education."

Historians show that the teaching profession, considered predominantly and traditionally an occupation for women of lower- to middle-class backgrounds, is gaining a higher status. Findings in Israel show that teaching is a profession enabling great social mobility, for women in particular; it serves as a springboard for more esteemed positions such as city mayors and government ministers.

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Teachers must be defined more as professionals both in terms of their participation in decision-making processes in the school and their teaching patterns, which should be reflective and adaptable to meet the needs of the school curricula, the pupils, the community, and modern teaching technologies. This professionalisation was the main reason for introducing the new induction policy in order to complete the process that started with academisation.

### **3.2 The Induction Policy and Project**

Induction policy in Israel evolved in an unusual fashion following an experimental 3-4 years period. Every teacher training college was provided with the opportunity to formulate its own induction programme, naturally remaining strictly within the framework of the policy and organisational guidelines determined by the Ministry of Education. In our programme<sup>31</sup>, there are several cycles of support during this significant year (Harvey and Drolet, 1994). The core of these cycles is the mediated

reflection that promotes professional self-awareness of NQTs and gives us the opportunity to take a glimpse into their '*patches of profession*', describe and understand them.

In the induction programme case, the Ministry of Education has taken a rare detour and chosen a project having the tremendous potential to enhance the performance of NQTs. It is one of the most appreciated programmes in the last decade.

The idea of an organised period of induction was raised for the first time in 1979. The government committee established to study the teacher's position and the teaching profession, headed by the judge Dr. M. Etzioni, declared the following:

**"In light of the tasks faced by the Israeli educational system and the vital need to ensure a constant level of education, it is our recommendation, with the objective of increasing the status of the teacher and teaching profession (Section 2.12, p. 10), to introduce a year of induction for teachers and kindergarten teachers upon completion of their studies in universities or colleges.**

**During the induction year, the teacher will receive close instruction by a veteran teacher, preferably from among the school staff where the teacher works.**

**During the induction year, the teacher will receive a full salary but will teach no more than one third of the quota of teaching hours. The remaining time will be devoted to regular meetings held with veteran teachers in the school and active participation in general school activities (excursions, parties, social activities, tutorials, etc.), as well as the completion of his/her professional and pedagogical education."**

**Etzioni Committee – Special Circular, 1979**

Only nine years later, in 1988, the Etzioni Committee recommendation was partly implemented through the first induction programme. This voluntary programme involved following up with NQTs who '*requested support*' and the supervision was given by colleges of education (Peleg, 1998). The programme was simple and effective, and properly met the needs of novice teachers, but involved the participation of only some NQTs. This kind of induction has continued in some colleges and universities up until 2001.

The induction programme was initiated in the 1995/6 academic years, involving the participation of about 150 fourth-year NQTs from four colleges. The programme was

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<sup>31</sup> The programme of Oranim – Academic school of Education



expanded in the 1996/7 year to include about 380 NQTs (from a total of about 3,500 fourth-year students studying in academic colleges) from 17 colleges. A year after, in 1997/8, about 750 NQTs participated, and in the final year of the experiment, close to 1,000. The programme became a compulsory component of teacher training as of the 2000/2001 academic year.

The objectives of the programme stemming from the induction policy as defined by Sara Ziv were:

1. To gain '*real-time*' experience in all aspects of teaching.
2. To gain experience in teamwork.
3. To gain experience in decision-making.
4. To become familiar with the entire school system.
5. To gradually enter into the teaching role.
6. Bridge between theory and practice.
7. To strengthen the teachers' self and professional image.
8. To have the NQTs assessed by the educational system.
9. To re-assess the training process.
10. To develop tools and a framework for properly absorbing NQTs in schools.

(Ziv, 1997 Special Circular for the Induction Programme)

The induction project was analysed in a controlled experimental fashion over a period of four years (1996-1999). This experiment gradually increased in terms of both the number of participating students and colleges of education. In 1999/2000, all colleges of education and '*colleges to be*' were included in this experiment, involving about 1,000 students studying the teaching profession.

An important turning point occurred when this induction programme became a compulsory one, as of the year 2000/2001 following four years of voluntary participation. We had to adapt to new conditions in which good coordination and a management team is needed more than before. The many diverse needs of NQTs and their mentors showed that horizons were continuously expanding. This programme, like many other educational projects, took on certain significance and one change leads to another.

In the background of this project were two major dilemmas. The first was the dilemma faced by NQTs who, already in their first year of teaching, were expected to be professionals on all fronts. They had to cope independently and professionally with managing and organising their class, communicating with parents, and carrying out

teamwork and other teaching/learning tasks, as if they have had many years of teaching experience.

The second was the dilemma of the EPMs following up with these NQTs during their first year; they helped the teachers not only to survive and get through the day, week and month, but to also commence the long road of PD by learning from their successes and failures, developing self-awareness and engaging in critical reflection and in-depth observation.

The induction year is a narrow sector of activity having extensive contexts in terms of the training period prior to it and the subsequent long period of continued PD. Induction brings a shift in role orientation and an epistemological move from knowing *'about'* teaching to knowing *'how'* to teach. Experiences that accompanied by mediated instruction were identified and reflection was promoted in order to sharpen the differences between *'doing teaching'* and *'being a teacher'*<sup>32</sup>.

“Becoming a teacher involves forming a professional identity and constructing a professional practice. Both aspects of learning to teach must unfold in ways that strengthen the beginning teacher’s capacity for further growth” (Feinman-Nemser, 2000; p. 18).

Implementing the induction policy in Oranim, an academic college of education was a rare opportunity for teacher educators to receive fresh and on-line feedback from our graduates and to strengthen the interactions between the college and the fields<sup>33</sup> of educations in the north of Israel.

### **3.3 Oranim – Academic College of Education**

Oranim, the Academic College of Education of the Kibbutz Movement, was founded in 1951 in the North of Israel. Today, Oranim is the largest Israeli teacher’s educating institution and enjoys an excellent reputation for combining quality teacher educating, academic research, and value-oriented education.

Over 5.500 students study annually at Oranim: 2,700 students study full-time, the others are in-service teachers in supplemental programs. Oranim’s students are representative of the entire North of Israel. About 25% are Arabs and Druze, 10% are immigrants both from the Former Soviet Union and Ethiopians; 65% are from veteran Israeli families, from agricultural settlements (Kibbutzim and Moshavim), from

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<sup>32</sup> For such an induction, a longer period than what a one-year action research could reflect is needed.

<sup>33</sup> I call them fields, in plural, because of the different kind of schools and different educational jobs that the NQTs are appointed to.

development towns, cities and border settlements. Many of them represent the first generation of academic education in their families.

Oranim employs 700 highly qualified, dynamic teachers who contribute to the high standards not only of the college itself, but to the implementation of innovative methods at schools all over Israel. The outstanding quality of teaching in Oranim, the unique spirit of cooperation and teamwork, and the direct connection with the field makes Oranim a innovative institution in the education system of Israel.

Oranim offers study programs for all ages and educational institutions: early childhood education, elementary school, junior high and high school, special education and art education, informal education and community leadership. Oranim grants the Israeli teacher's diploma, the degrees of B.Ed., B.A. and B.Sc., and plans to open in the near future a M.Ed. program. Oranim houses pedagogic centers and laboratories for various disciplines, an experimental kindergarten, a research center for assessment and evaluation, and many other institutes that connect educational theory and practice.

Oranim's progressive, humanist value system includes respect for minorities and their traditions, a pluralist approach to Judaism, and the firm belief in education's contribution towards a peaceful, tolerant civil society in Israel.

The local process of implementing the Induction project was unique<sup>34</sup>; the model was not based only on the national frameworks. Great flexibility was applied to respond to every need and recommendation for improvement. As a result, we developed a special model<sup>35</sup> that responds to the complex needs. Other colleges adopted some of the recommendations for improvements and innovations.

### **3.4 The Induction Model in Oranim– Cycles of Support**

We can consider teaching/learning activities as a complex activity networks because in each network or system, certain beliefs, norms, and values are assumed and enacted. The NQTs and their videotaped teaching situations are not unitary, or universal. They move in and out of several intersecting networks and have unique perspectives.

Nevertheless, we think that there is some potential in close-examining those teaching activities and the tools available. For example, Elbaz's (1988; 1992) analysis of

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<sup>34</sup> A mandate was given to every college to build its own model for implementing the induction programme while strictly conforming to procedures dictated from Ministry of Education.

<sup>35</sup> See appendix 2

one teacher's reflections, constructing her *'practical knowledge'* illustrates how different activity networks reshape teachers' images of teaching.

Thus, looking at the tools, images, and issues that NQTs construct and use in their teaching activities and interactions, allow us to study how the mind *'extends beyond the skin'* (Wertsch, 1991, p. 14). If we better understand the tools and the process – including issues and images – that NQTs use to make sense of their teaching, then we may be able to create and offer new tools that will help teachers explore and challenge their self-awareness about teaching, professional development and pupils.

The following components of the induction appear in the Oranim School of Education model. Some of these components exist in other colleges and others are unique to Oranim's induction programme.

### **3.4.1 Weekly Workshops**

The first induction year is characterised by emotional and professional crises. The requirement that a NQT must function like a veteran, experienced teacher regarding issues such as communication with parents, discipline and violence problems in the classroom, or even professional subjects such as the organisation of the study environment, represent a source of extreme tension and pressure. The different and diverse frameworks in which NQTs must function raise a wide variety of problems that must be dealt with on a personal level in the workshops (Ballantyne, 1995).

The workshop represents a regular *'support group'* in which it is possible to receive emotional support (*'to be'*) as well as exchange experiences and skills (*'to do'*). The professional guidance, in which the workshop instructor participates with other instructors and a skilled supervision, provides a basis for the professional development of the group of NQTs. This support is vital during the year in which *'the shock of reality'* and the difficulties ascertain professional survival (Merseth, 1991).

Objectives of the workshops:

- To enable NQTs to cope under the difficult conditions of ambiguity and constant change.
- To support teachers and empower their teaching abilities and thus enable them to provide support to their pupils.

The weekly workshops are required for certification and are an important induction component in every college. The second component centrally required is the school mentors.

### 3.4.2 School Mentors

School Mentors of NQTs come from the field. The quality of these instructors varies from place to place and from teacher to teacher. An instruction kit was prepared for the instructors. Attempts are being made to create professional connections between the college and the school mentors, but we are at a beginning stage and the road is still long. Special courses were designed for school mentors since the 2000/2001 academic year and a support system is being planned for use in places where this course is not yet offered. In the meantime, in order to respond to the needs of NQTs, expert pedagogical mentors from the college also provide them with support.

The school mentor is expected to play a central role in the induction programme:

“The school mentor of NQTs is appointed by the school’s head-teacher. It is recommended that the mentor be appointed from the school’s veteran teaching staff. The induction coordinator assists and follow-up on the appointment of the mentors. The mentor’s role is to accompany the NQT in diverse pedagogical activities in the school, such as preparing for the start of the school year, determining the homework system, integrating into the school’s teaching staff, becoming familiar with all pedagogical staff, providing assistance to the NQT in resolving ongoing problems during the year, holding regular meetings with the NQT, as well as reporting periodically on the teacher’s work and submitting written reports to the induction coordinator”<sup>36</sup>.

### 3.4.3 An Internet Website – ‘Hamama’

In order to respond to the diverse needs, a Website was developed entitled ‘*Hamama*’ An acronym in Hebrew for - Newly Qualified Teacher’s Internet Corner. Using funding from the Ministry of Education, and supported by the MOFET<sup>37</sup> Institute, the website was built to meet the specific needs expressed by NQTs. A team from the Oranim School of Education started to prepare this website in 1996. In 1997 the website became inter-collegial, involving the participation of other colleges.

The ‘*Hamama*’ Internet site is a virtual teacher’s room. It serves new teachers in the beginning stages of absorption in the educational system in Israel during their first years of teaching. It provides answers for a problematic year by creating a special

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<sup>36</sup> Part of circular “Getting Ready for Implementing Induction for College Administrators” – Ziv, 1997

<sup>37</sup> Institute of Research, Curriculum and Programme Development for Teacher Educators in Israel

environment, which encourages professional growth. It is dynamic, easily accessible and interactive. The address is:

<http://hamama.macam.ac.il>

This Internet site serves as a gateway to up-to-date information resources – unconstrained by time and location. It enables communication and sharing between new teachers and between them and their pedagogical mentors.

It includes a wide variety of materials:

- Information about teachers' rights.
- Up-to-date pedagogical materials.
- Recommendations for classroom activities.
- Links to reference materials both off and online.
- Questions and answers from the field.

The '*Hamama*' website is a gateway in Hebrew for educational resources, sorted and catalogued with the needs of the NQTs in mind. User-friendly guidance is provided for website users according to their individual needs and their level of familiarity with the computer-human interface.

The website enables identification and treatment of immediate needs of NQTs due to direct connections by e-mail and forums to colleagues and pedagogical mentors. The website is dynamic, the content of the website changes. Materials are added to and taken off the website according to the needs of teachers in the field, identified by the teachers themselves, by their pedagogical mentors and/or by the website developers.

The most unique aspect of the '*Hamama*' as opposed to the traditional support provided to NQTs, is the development and nurturing of a reflective community among the new teachers and their mentors, enabled by telecommunication – which provides easy access to both synchronous and asynchronous one to one communication and more open group discussion and interaction.

### **3.4.4 Flexible Support –a New Cycle of Support**

During the last two years<sup>38</sup> we started to add another support cycle that could be chosen by NQTs during their induction year. This cycle tries to implement the improvements suggested in the feedback we received from the support workshops held

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<sup>38</sup> 2001 -2002

over the past few years. Through '*leisure time activity*' we are trying to provide more relevant responses to the needs of every NQTs according to his/her place of work, the subjects arising during the course of the year, and the unique activities taking place in every place.

In order to do this, we recruited, in addition to the workshop mentors, experts in different fields from the Oranim School of Education who could lecture about their areas of specialisation and would be willing to respond to the requests and questions raised by NQTs. During the period that those meetings are offered, based on what is agreed upon during the discussion with the regular workshop mentor, it is possible to focus on one issue, pre-determined in advance. It is expected that the request will not be in the form of giving a one-time '*tip*' but rather holding two to three sessions throughout the year.

Following these free meetings, it is recommended that every NQT prepare a one-page report of what he/she did during the '*leisure time activity*,' including suggestions for improvement, ideas and additional needs. This documentation could later serve as feedback and the task of summing the new cycle of support.

Several examples of '*leisure time activity*' are listed below<sup>39</sup>:

1. Personal or small group discussions with the workshop mentors.
2. Activity from the home or from Oranim in a forum, locating professional information for teachers on the Internet.
3. Early childhood center – didactic and educational resources.
4. Elementary school classes' center – didactic and educational resources.
5. Mathematics center – personal instruction and sample resources.
6. Special education center – counseling and resources.
7. Coping with disciplinary problems and other problematic behavior patterns.
8. Counseling on the subject of beginning to teach reading and writing.
9. Incorporating music and the arts into teaching.
10. Original ideas for teaching science.
11. Integration of children having special needs.
12. Counseling and treatment by a communications clinician on the subject of hoarseness, voice and pronunciation.

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<sup>39</sup> We are always willing to consider additional ideas raised by the NQTs.

### **3.4.5 Reflective Video-tapes\***

The core of this study is the cycle of support that conducts the strategy of the reflective videotapes. Using stimulated recall to promote reflection in teaching is a new method. Using videotaping to stimulate this recall is even newer to reflection in teaching, and using video glasses in order to make these video films is a real innovation, as far as I know. This new technology is not only a means; it also gives a special viewpoint. It provides an opportunity for the teacher to concentrate on the pupils in his class since they are in the direct focus of the video glasses, as well as enabling making a full recall of his teaching – all this without another person being present in the class during his lesson.

A combination of the lack of research carried out in this area and the effectiveness of the practice provided me with a strong motivation to carry out this research enquiry. Teacher perception and representation are key issues in the process of this Action research. The main issues include understanding and commenting upon a certain reality and what happens in a class in order to learn from and act upon it.

Success in effectively capturing that reality and interpreting on it with the NQTs enabled us, the EPMs, to empower the reflective dialogues. This kind of data collection and the special zone in the professional development, ZO-PED, made this research enquiry very challenging.

### **3.4.7 Support Group Management**

The last cycle describes the management approach to the whole enterprise, the Induction project and the Action Research accompanying it. Implementing national government policies is a difficult and complex process. The central argument of this section is that '*team management*' has an interesting potential to enhance this implementation.

The purpose of this last cycle was to organize all the six cycles described above, and to address two topics: the implementation of change in education and team management. Every one of these topics has at least two dimensions: the procedural dimension and the substantial dimension. Those two dimensions are most of the time linked together.



Teaching students at Oranim School of Education<sup>40</sup> and coordinating the induction programme, a complex of educational changes that “intend to simultaneously support newly qualified teachers (NQTs) during their first year of teaching and promote the teaching profession”<sup>41</sup> was my new role. During the process I identified several key factors of team management.

Implementing the induction programme brought us, the EPMs, closer to the political issues in the background of this programme. In Israel, as in England, various political leaders are trying to integrate into the capitalistic world without losing their human and educational values that have guided them for many decades<sup>42</sup>.

Through our joint activities in the management team, I the coordinator, had an influence, and was influenced by acting as a central participatory observer<sup>43</sup>. Therefore, this is an authentic perspective rather than an objective one, which expresses values and opinions.

“The beginning of every research activity is not to learn about the field and to study it, but rather to distance oneself to a broader horizon... the tension between the desire to arrive at the essence and the necessity to talk in a generalised scientific language places the qualitative research in a situation of surprise and doubt regarding the possibility of existing simultaneously in both worlds... to be a part of a situation and to be able to look at it from the outside...” (Sabar, 2001; p. 43)

The type of management used and the process of the model were critically examined, and helped us to determine how best to proceed. We learned, that since solutions were not always apparent, we must look for them creatively. The focus and key issue was on team management working as a ‘*support group*’.

We felt the synergy, the significant contribution of team management, as described by Wallace and Huckman in the beginning of their book:

“Synergy may be achieved where all members combine their energies in working towards shared goals. Here the team amounts to more than the sum of its parts” (Wallace and Huckman, 1999; p. 2)

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<sup>40</sup> With a culture of teams working together, and a spirit of a strong egalitarian relationships.

<sup>41</sup> Quoted from the policy paper – the circular from 1997.

<sup>42</sup> It is commonly said: “We have a little bit of socialism left mixed in with lots of tonic.”

<sup>43</sup> This situation created a dual awareness in me – one about the field in which I am working, and another about myself as an individual, having an influence in this field and at times even creating it (Cohen and Mannion, 1994).

This style of management raised many problems but had also points of power and strength. The enriching and enlightening discussions of the team were also problematic and open to interpretations.

Upon analysing the problems arising from team management and observing the directions of possible solutions from literature (Wallace and Hoyle, 2001; Bolam, 1994; Tomlinson, 1997), the following two main types of problems were determined.

### **Universal Problems**

In the classic organisation model of sociology, one clear authority exists and every worker knows who the manager is to whom he must report. In recent years, deviations have evolved in this model. Organisations have become much more complex, thus affecting economic and commercial organisations, as well as other types of organisations such as schools and colleges in which the complexity is even greater. These deviations are expressed in different solutions, such as two general managers working within one organisation, different partnerships in management, etc. We present another possibility – team management – a team that works as a support group.

Team management has several disadvantages, such as a slower decision-making process, different ways of observing a given data field, difficulties that arise when no consensus is arrived at, open and concealed oppositions that are both relevant and irrelevant, etc. The different expectations of the team members (Tomlinson, 1997) also depend on their professional and personal backgrounds.

### **Local Problems**

The transition from classic management to team management in our teacher educating college was rather natural. The team's learning and developing culture was not foreign to us. However, we were still talking about an innovative programme that strengthens the ties between the college and the field and was closely supervised by the Ministry of Education. We were not talking about a regular team and standard roles, and we confronted many problems (Farrell, 2001; Jirasinghe & Lyons, 1996; McEwen, 1997).

The most and least critical issues, priorities, managing the funding sources, team's work profile, types of supervision, slow progress but professional growth, advantages of a fixed team that develops together visa versa the desire to refresh the team by adding new members; the question as to whether flexible developmental planning should be required; long and short term planning (Wallace and McMahon, 1994; Stacey, 1992; McEwen, 1997).

The situation of dual awareness – the team's awareness and self-awareness of the coordinator, a team member who influenced reality and sometimes even created it, were local problems that influenced team management.

Several interesting and analogous processes occurred among the team running the programme. Everybody was expected to adapt to new requirements. Many questions arose, some of them only practical, but others more substantive and interesting, here are some examples:

- ❖ What does the management team decide together?
- ❖ How often should the meetings be held and what should their duration be?
- ❖ In how much detail must the subjects be prepared in advance?
- ❖ What are the best ways to gain feedback from NQTs about our college programme, and what should we do with this feedback?
- ❖ Must a consensus be reached on any problem or is it possible to maintain a free choice up to a certain limit?
- ❖ What style of supervision for the team should be used?

The management team was initially comprised of six individuals who taught workshops once a week and met once a month for the purpose of learning and treating management-related problems that generally arose in the new project. The team was chosen from a group of veteran, pedagogic instructors and experts<sup>44</sup> who usually accompanied student teachers. Now they were requested to deal with the actual induction of the NQTs into the teaching profession.

Two parallel processes took place at this time due to the unique timing of the induction programme: the NQTs underwent their first year of teaching, and the management team underwent their first year of instruction. We, the members of the team, learned a great deal during this year but also made numerous mistakes, as is typical of many new teachers. We documented this entire process in great detail.

After two years the team grew to eight members, and after three years, with the transition to compulsory induction, expanded to 10 members. We felt the need to continue and develop as a support group. Beginning with a certain type of supervision, which focused primarily on the EPMS' professional development; a request for a different type arose in the third year, which supported both personal and professional

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<sup>44</sup> Each having between 7-15 years of experience in this position

development, as is common in clinical professions such as social work and psychology<sup>45</sup>.

The management team's significant development commenced when, following an in-depth discussion we decided to improve the team's learning and added meetings supervised by an expert.

An important turning point in the teamwork occurred when we decided that the organisational subjects would be brought up for brief discussion, based on points prepared in advance and sent by E-mail. More time was allocated for more substantial and value-related subjects.

First, we identified different needs among the NQTs, the most important of which was personal and professional support. In parallel, the management team had the same needs and decided to use a supervision enriched by psychological and clinical aspects.

Another turning point took place during the last academic year (2001-2002). We tailored the workshops to meet the needs of NQTs from various disciplines.<sup>46</sup> Improvements were incorporated from the previous year, in a flexible approach. We were aware of the oxymoron existing here: the more flexible the approach, the clearer and fixed the framework has to be.

Parallel to this innovation in the workshops, the management team itself underwent a significant change regarding the type of relationship to other disciplines. An excellent opportunity was provided for rethinking and renewal; a new privilege to obtain direct feedback from the college graduates about the quality of our education.

In summary, it may be seen from the dynamics described above that it was not easy to manage with the help of a management team (Stacey, 1992; McEwen, 1997). There were many individuals whose opinions had to be taken into account and this method of decision-making involved a great deal of time. It was very difficult to satisfy the expectations of everybody.

However, there are excellent advantages to team management: skills are complemented and different points of view regarding certain situations are expressed (Tomlinson, 1997; Deal & Peterson, 1994; Belbin, 1993). Regular participation in the

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<sup>45</sup> The division of time was as follows: one meeting was held every month whereby two hours were devoted to management-related and organisational subjects and four hours to guided group support.

<sup>46</sup> Graduates from three main disciplines participate in the induction programme: early childhood, pre-school discipline, special education discipline, and the primary school discipline. There are two disciplines that are not yet compulsory for the induction stage in teacher training colleges.

supervision workshops contributed to this awareness and helped to develop a team culture in which the team members are conscious of these advantages and disadvantages.

What are the characteristics of a manager/coordinator working with a team? There are managers having more authority and those having less, there are charismatic managers (Hargreaves, 1996; Hoyle & John, 1995) and those who work routinely and effectively, there are managers who are very creative and others who are less, there are managers who are leaders and others who are good administrators, which is also important. All these qualities cannot be squeezed into one person but team management could perhaps represent a type of sophisticated body that could promote key issues in a situation of constant change and great complexity.

What are the characteristics of management that promote or inhibit teamwork? It is a world of complexity, especially educational management. Studying the documentation we ended up with a long list of characteristics. Then we classified them and organize this knowledge in order to gain a profitably thought. We discovered a particular conceptualisation: parts of them were about '*doing Educational Management*' and the others parts were about '*being Educational Leaders*'<sup>47</sup>.

This distinction made many decisions clearer and better understood, and it was applied in team management and beyond. It can also explain the perpetual need of learning and supervision. The organizing and writing of all the characteristics provided us with a helpful new framework for understanding team management. It was possible to rethink '*the concept of team management*'. A more in-depth observation of educational management styles regarding administrative management, systems-related management and management per se is apparently required (McEwen, 1997). In the present research enquiry the description of '*team management*' serves only as background to the main research and tries to explain the context of the central study.

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<sup>47</sup> See appendix 4.

## 4. Methodology, Method and Process

First I will distinguish between the methodology, which was Action research and the method that we adopted from the literature, meaning content analysis with a hermeneutic way of interpretation<sup>48</sup>. For the complex pedagogical situations and the variety of educational events, it proved to be the most appropriate method. As for the methodology, at the beginning I considered conducting a group of case studies, but the many changes and developments dictated the Action research, which fits better to the evolving phases and stages of the research. The accepted factors in qualitative research for examining reliability differ from those used in positivist studies (Wallace, 2001). A qualitative constructivist study, as is presented here, seeks reliability by utilising personal responsibility, the ethics of concern, majority agreement about the data and dialogues with the research subjects.

The essence of qualitative research lies in the interpretation and search for significance in a world of complex phenomena, which begs for identification, explanation and meaning. Action research is not a research stream in the accepted sense<sup>49</sup>, but uses a study, which has a practical approach and is suitable for professions such as teaching and social work, as well as all areas dealing with introducing change. The pilot study carried out in the research began to promote and enhance self-awareness of NQTs and revealed the significance they afford to their new reality as independent teachers. Now in the main study I will continue one step further, to explore their professional development (PD).

The study, which has lasted almost four academic years, emerged from the layer of praxis – the Induction Project. It was designed, as a response to the NQTs' immediate needs as they were revealed to us in the weekly workshops, the forums on the website and in other free conversations. The importance of mentor-teacher-pupil interaction was emphasised and served to promote reflection and professional self-awareness.

Since this was a qualitative study, I was constantly dealing with the subject of determining what the research tools should be, the number of research subjects, the extent of the in-depth study and the presentation of the data. I drew on the methodological frameworks developed by others (Sabar N. 2001; Whitehead J. 1989,

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<sup>48</sup> See more details on pages 64-65.

<sup>49</sup> See definition in the first page after the cover.

2001; Hachohen R. 1997) and my own framework that emerged from the previous phases<sup>50</sup>, to help me make sense of it all.

The discussion was in-depth and as the dialogue developed, new questions were asked and certain generalisations were brought up for consideration at the different reflection stages and levels. As new perceptions and insights developed and the dialogue became more complex and problematic, the validity and reliability of the study's beginning were pushed aside, as Sabar (2001) already said:

“The journey itself during dialogue is half the fun. The long-term implications of the dialogue will create, over time, a legitimate variety of methods that will increase our understanding of educational subjects.” (Sabar, 2001; p. 55)

By promoting perspective transformation, the research relationship that developed between the participants aimed at promoting their self-awareness. Hargreaves (1996) classified participants as co-researchers who are valuable in that they are instrumental and equal partners throughout the whole research process. Empowerment of the research participants through their engagement in the activity was both a specific intention in this study and also a welcome bonus since participants were able to benefit from regular and frequent opportunities to discuss their new experiences. Since we were interested in insights, discovery and interpretation, rather than hypothesis testing, we chose a qualitative approach, whereby every NQT or expert pedagogical mentor (EPM) was considered a participant researcher.

As discussed in the previous sections, the background for this research was based on several aspects: the promotion of self-awareness, the time axis of teachers' professional development, the different dimensions of professional development and NQTs' concerns and priorities (Fuller, 1975).

## **4.1 Qualitative Methodology in Educational Research**

We began by looking at qualitative inquiries in general. Qualitative research seeks to probe deeply into the research setting in order to obtain an understanding of the way things are, *why* they are that way, and *how* the participants in the context (the teachers) perceive them.

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<sup>50</sup> See previous phases in diagram 2.

“The goal of this and much other qualitative study is the development of *theoretically informed interpretations* since this is the most powerful way to bring reality to light<sup>51</sup>” (Strauss and Berliner, 1996; p.5).

Lincoln and Guba & Lincoln (1994) recognise that qualitative inquiries tend to have a number of characteristics in common. Usually they have an empirical basis, require context-sensitivity, and reject the notion of context-free generalizations. They place primacy of subject matter before primacy of method, require the personal involvement of the inquirer in the field of study and avoid pre-ordinate designs in favour of emergent ones. Qualitative inquiries use methods inventively and tailor their choice and applications to each inquiry situation, thus they require careful documentation, justification and description of methods used.

The universal character of the phenomenon of human change is expressed as a basis for professional self-awareness. Van Manen (1991b) defines pedagogical reflection and pedagogical thoughtfulness, as endeavours to influence the good effect that teachers may have on children. *Interpretation* is the key factor in our study and the main aspect will deal with the teaching/learning processes of adults – andragogy<sup>52</sup>.

Hermeneutics is derived from the name of the God Hermes whose role in Greek mythology was to convey the messages of the gods to humans and then interpret them. It is defined as a theory or philosophy that ‘*provides significance to things by interpreting them*’ (Bleicher, 1980; Gallagher, 1992). The object of Hermeneutic investigation is to understand and interpret languages and texts, an approach that will be expanded to include understanding and interpreting videotaped texts that represent teaching/learning activities. Such expansions already exists since, at the beginning of the 19<sup>th</sup> century, Hermeneutics dealt primarily with religious texts while today, it more often deals with human behaviour such as we see in the creating of art and films (Levy, 1986).

Hermeneutic interpretation differs from regular explanations. In an explanation we generally try to clarify a text without making additions, while hermeneutic interpretation tries to clarify a text by emphasising its internal relationships, context, etc., which is in fact an expansion of the text. But the process does not end here since the text analyst, after identifying the text’s essence while expanding it, now engages in the task of

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<sup>51</sup> Trying to make tacit knowledge more explicit.

<sup>52</sup> See terms explained in the first page after the cover sheet.



condensing it. The text,<sup>53</sup> it appears, is somewhat unsatisfactory in its original form therefore something is sought within it that cannot be seen on the surface in its first reading or observation.

Schwandt (2000) describes the hermeneutic roots of interpretive and constructivist approaches in qualitative research in an attempt to understand the human experience *from the viewpoint of the individuals* living in the real world.

“Hermeneutics is not one organized theory but rather involves a variety of theories that differently define the essence of the work of interpretation. The different definitions pose serious epistemological conflicts revolving around questions such as: Is the text analysis objective or subjective? Should a study be made using a positivist or a relativist approach? Do social sciences differ significantly from natural sciences?” (Sabar, 2001; p. 79).

The hermeneutic investigation based on the interpretive theory of Paul Ricoeur (1981) grew out of a background of criticism of objective hermeneutics and even criticised the attempt to develop an objective interpretative science for subjective human actions. Ricoeur proposed phenomenological hermeneutics, which combines objective and subjective components in the study of texts. He defines a text as a written dialogue, “*material that becomes fixed through writing*”. For our study we can expand on this definition by having it apply to every message that becomes fixed through videotaping, writing and documenting since, in order to promote self-awareness when reflecting on teaching activities, we have to combine objective and subjective components which is what hermeneutics deals with.

Philosophical hermeneutics claims that it is difficult to enter the soul and mind of a person since every man has his own ‘*perspective*’ on any given subject. This perspective includes his early assumptions and opinions by which he interprets the world. In this work we are dealing with self-awareness of teachers and their ‘*perspectives*’; and whether this can be promoted during their ‘*threshold stage*’. In addition we also wish to enquire into when and how self-awareness is promoted, and whether it empowers dimensions of PD?

Vygotsky’s ideas of the dialogical nature of human thought have provided the foundation for a philosophical inquiry into the interaction of culturally and personally diverse forms of thinking. A new type of logic is emerging that uses the dialogical

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<sup>53</sup> Every time I refer to a “text” we mean a variety of texts, written, spoken, videotaped.

consciousness of the humanities as a prototype, instead of the mono-logical thought of the natural sciences.

## 4.2 Expanded Action Research

Numerous definitions and characteristics made by researchers about Action research exist but only a few that relate well will be presented. Kemmis explains that Action research provides ways for people not only to improve their social lives through research on the '*here and now*', but also allows them to relate to wider social structures and processes. They do this as people whose interconnections constitute the wider webs of interaction that structure social life in discourses, in work, and in the organisational and interpersonal relationships in which we recognise relations of power (Kemmis, 1993).

Altrichter et al (1993) say that Action research is characterised by a continuing effort to closely interlink, relate and confront action and reflection, in order to reflect upon one's conscious and unconscious actions, and to act reflectively to develop one's knowledge.

Action research should always be *critical* in the sense that it is about relentlessly trying to understand and improve the way things are but especially about how they can improve. But it is also *critical* in the sense that it is *active*, it aims at creating a form of collaborative *learning by doing*. It aims at helping people understand themselves as both the agents and the products of their PD.

If we look at locations where living forms of educational theories are being produced (McNiff 1988<sup>54</sup>) we may be able to trace the development of a number of teacher/researchers who have used the following form of action/reflection cycles in order to present claims that they can get to know their own educational development as they investigate questions of the form, they typically ask: "*How do I improve this process of education here?*" or "*How do I modify my problems, ideas and actions in the light of my evaluations...*"

This form of enquiry falls within the tradition of Action research. It can be distinguished from other approaches in the tradition through its inclusion of 'I' as a living contradiction within the presentation of a claim to educational knowledge. (Whitehead, 1989 p.20)

One commonly misunderstood aspect of Action research is the role of teacher reflection. Although reflection is an important aspect of Action research, not all forms of reflection are equally useful. For example, reflections that occur spontaneously during classroom activities happen so quickly that they tend to be momentary, fleeting, intuitive and tacit<sup>55</sup>. In the design of our Action research, we will try to promote a different form of teacher reflection, one that takes place removed from the immediacy of practice. Such reflections permit more concentrated, self-aware reflections, and with the *accurate recall* videotaped by the teacher, from his angle of vision, the teacher can become his own *observer* and *observee* at the same time. Thus, while reflection is an important aspect of Action research, not all types of reflections are equally useful in the process.

All aspects and levels of reflection are intended to locate a problem or difficulty during or after the teaching activity, and I will demonstrate it later in detail. An Action research intends to offer solutions for solving a problem but in the Action research planned here, emphasis is not placed on the results, rather on the *pedagogical didactic dialogue* that might develop during the process of reflection at different stages. This self-awareness can advance teachers' professional development to enable them to determine different ways of solving both current problems and the many future problems they may encounter in the years to come. We are aware that reflection still does not ensure advancement and improvement. In the research enquiry planned here, we will try to determine the level of mediation required by the expert mentors so that this reflection will indeed advance the teacher in his Professional Development (PD).

Action research is a type of practitioner research that is used to improve the practitioner's performance. Action implies doing or changing something and Action research is a process in which an individual teacher, or several teachers together collect evidence and make decisions about their own knowledge, performance, beliefs and influences in order to understand them and improve. Action research can provide opportunities for teachers that can lead them to re-examine their practices and alter their taken-for-granted beliefs and understandings.

The main idea involves using a *different type of thinking*, and mediation to think about the Action research and explain why it is used.

“Action research is about seeking one's own voice, an authentic voice, and a voice from which to speak one's experience and one's

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<sup>54</sup> The first link in Jack Whitehead internet site - <http://www.actionresearch.net>

<sup>55</sup> Self-awareness can perhaps enhance this tacit knowledge and intuitive reflection to develop from 'reflection on action' into 'reflection in action'.

ability to learn from that experience. Action research is about decentralising the production of knowledge, and giving a ‘voice’ to practitioners and community members. It is also about helping others (our students, our patients, our clients) to find their own voices, to encourage them to speak out, to ask questions, to context conventions and prescriptions, including those of professional practitioners” (Winter, 1998; p.18).

### 4.3 The Process of Data Collection

The most useful reflections for Action research are those based on formal, tangible evidence in regard to one’s practice. It is worth considering here how much of the effect is about placebo effects, but we should remember that any intervention that causes NQTs to stop and think again about their practice would have beneficial effects on the development of professional self-awareness. The specific contribution of the video-glasses will be demonstrated through the special examples, emphasizing the special point of view that distinguishes this recording from the traditional video methods. The videotaped lessons using video-glasses allow teachers to obtain tangible information that can be used to independently corroborate or validate their own views of practice. The use of formal data is in keeping with the view of Action research as systematic, inquiry based, and data driven.

The first research design, described in the educational research unit<sup>56</sup>, was in many aspects different from the one presented here. Even the recently concluded pilot study, was a little different. According to the frameworks of socio-cultural theory which has guarded our data collection and analysis (Smagorinsky, 1995; Vygotsky, 1978; Feurstein, 1998; Wertsch, 1991) these dialectical processes can be seen as the characteristics of an expanding Action research that changes as they develop.

The videotaped teaching activities, reflective monologues, dialogues, interviews and other documentations were used to both mediate and make sense of those complicated teaching activities that need critical pedagogy in order to be understood. First I will describe *when* the data was collected then *how* it was organized in stages that can demonstrate the complicated process of enhancing reflection of NQTs, mediating them to self-awareness and empowering them in the beginning of their PD. With the

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<sup>56</sup> See phases in the research in diagram 2.

help of this structure I hope to encapsulate the complex situations that NQTs have to respond to in the induction year.

### **4.3.1 History, Phases and Range of Data**

Before I present the phases of the research and a detailed outline of the structure and method, I will begin with a few sentences about the history of the induction programme in Israel and graphically show the time line. (Diagram 1)

The preliminary concept of adding an induction year at the end of the teacher education period was introduced in the recommendations made by the Etzioni Committee in 1979<sup>57</sup>. After that almost 10 years passed without any progress being made in this direction.

In the year 1988, a new attempt to introduce the induction year was made. Soon afterwards, the project following the absorption of new teachers commenced, but this was only for beginning teachers who *chose* to receive this support from expert mentors in the colleges, Oranim School of Education, among them. The project continued for about 12 years, operating parallel to the induction programme in its final years.

In 1997, the induction program was launched.<sup>58</sup> During the first four years, it operated as an experimental program and the induction was not compulsory. Starting in the year 2001, the induction became compulsory for all graduates in the academic colleges. In the year 2002, the last teaching colleges and several universities participate, but there too, the first stage is elective and not compulsory. Only in the year 2004 will the induction program become compulsory for all NQTs in Israel.

A national survey accompanied three years of the experimental four-year period on the subject of specialisation, expectations, awareness, school based mentors and NQTs expectations. This survey accompanied the induction programme in Israel and was in the background of the Action research of this study.

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<sup>57</sup>See details in chapter 3

<sup>58</sup> More details can be found in chapter 3.

**Diagram 1 - The History of the Induction Program in Israel**

>1979	1988	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	>>>>																				
Etzioni's Committee Recommendations																																			
	Absorption of New Teachers in the Educational System																																		
	X	X	X	X	X	X	X	X	X	X	X	X	X																						
	<table><tr><td colspan="7">Induction Program -</td></tr><tr><td colspan="4">Voluntary</td><td colspan="3">Compulsory</td></tr><tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr></table>															Induction Program -							Voluntary				Compulsory			X	X	X	X	X	X
Induction Program -																																			
Voluntary				Compulsory																															
X	X	X	X	X	X	X																													
<table><tr><td colspan="3">National Survey</td></tr><tr><td>X</td><td>X</td><td>X</td></tr></table>															National Survey			X	X	X															
National Survey																																			
X	X	X																																	

Looking back on the development of this research enquiry five phases can be identified and they include all the unit assignments<sup>59</sup> and the recent study:

From September 1999 to November 2000, I studied the induction policy as it was planned and implemented. The assignment of this unit was called:

*“The Teacher Induction Policy in Israel – The four year process of a policy statement focused on Newly Qualified Teachers”*

From July 2000 to May 2001, I prepared the research program, which has undergone many changes in the past two years. The educational research and philosophy ended in an assignment that was called:

*“The Reflective Beginner: Promoting Professional Development of Newly Qualified Teachers with Mediating Reflection – Planning an Action Research”*

The third phase, concluding the educational management unit somehow drifted to the managing of the induction program, lasted from May 2001 till April 2002 and the name of part 2, the one relevant to the research enquiry was called:

*“The Contribution of a Management Team to the Implementation of Educational Change (namely the induction program)”*

Partly parallel to the fourth phase I prepared the pilot study, which also underwent numerous changes but the focus became clearer. The title of the pilot study was:

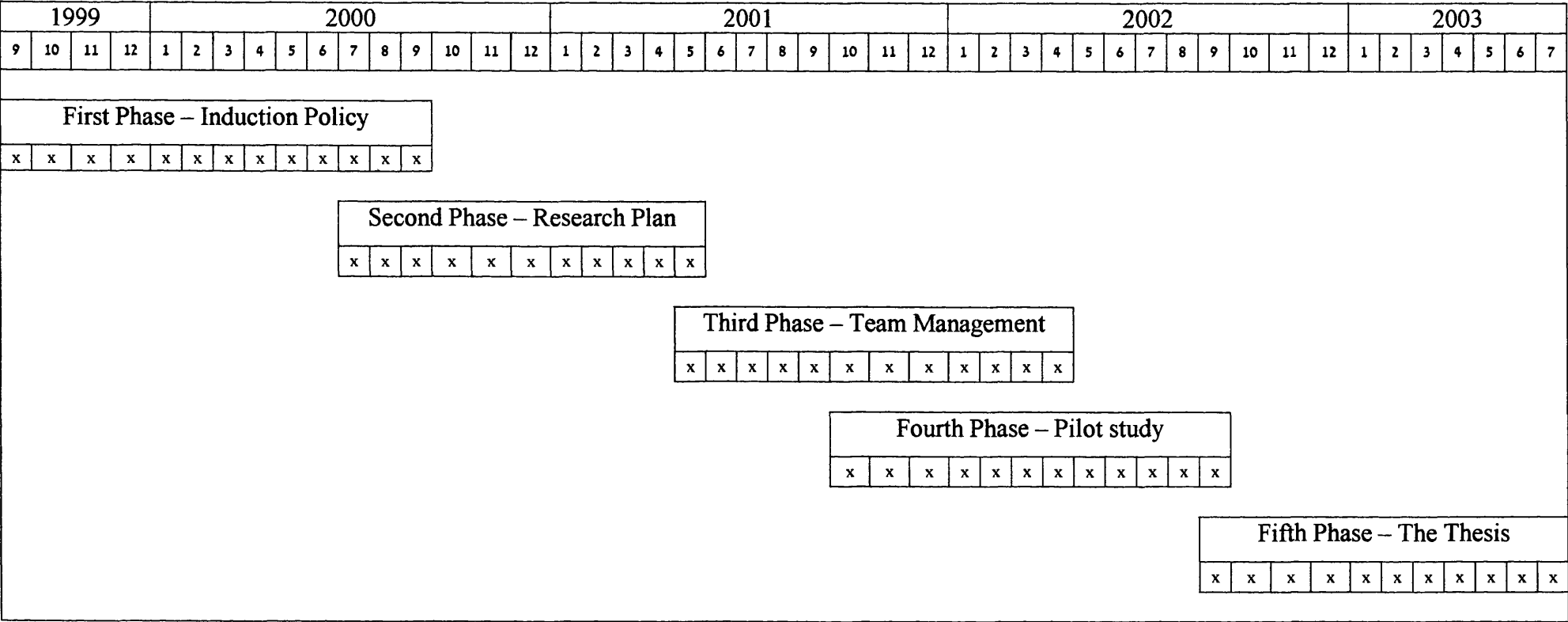
*“The Reflective Beginner: Promoting Self-Awareness of Newly Qualified Teachers by Using the Reflective Videotaping Learning Strategy”*

Beginning in September 2002 up until the present, I have been dealing with the fifth phase, my main research study – the thesis itself – in which new emphases are being made. The title, written above, at the beginning of this study, can perhaps represent the evolving interests and new emphases.

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<sup>59</sup> See diagram 2 next page.

Diagram 2 - Phases in the Research





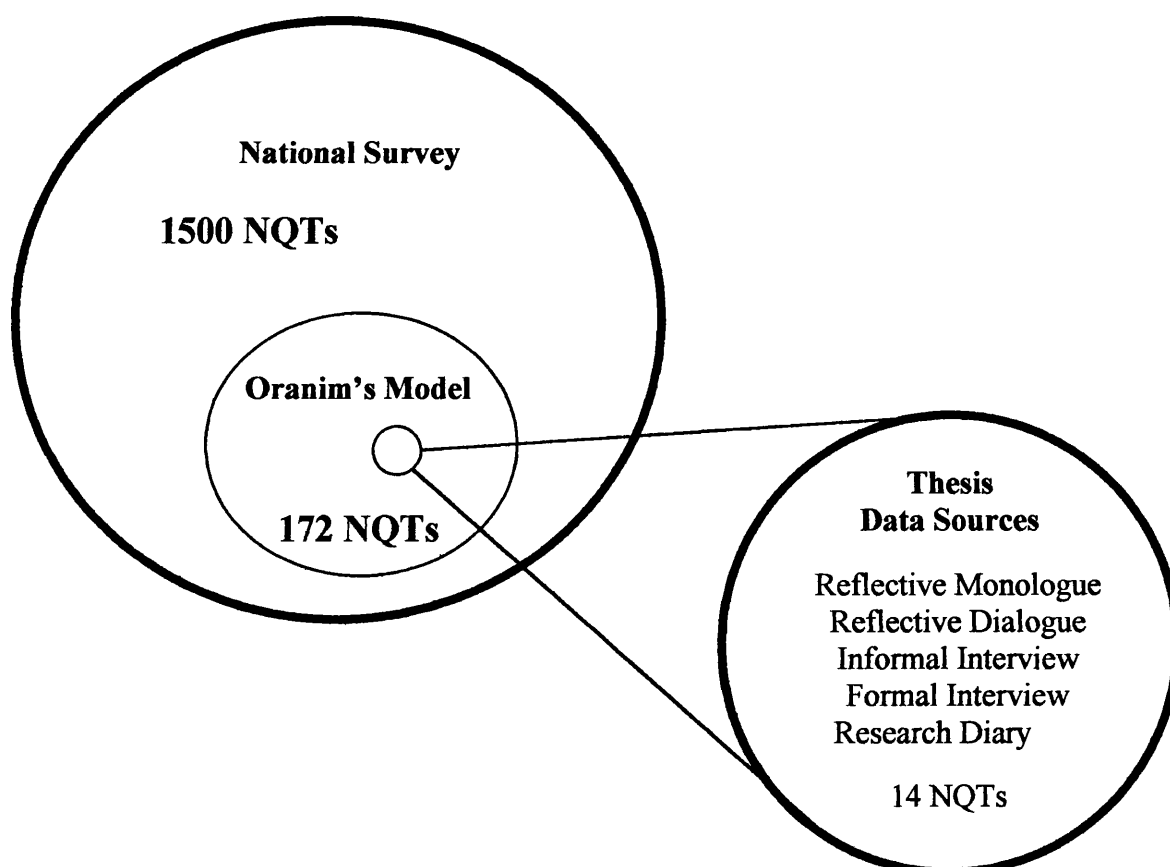
The main research enquiry was constructed to explore the professional development of 14 NQTs, over a period of one-year, but in the last four phases of research, additional documentation from the different cycles of support was collected and was used to triangulate and enhance the research aim and subjectives. During the past phases and especially through the pilot study phase important data accumulated.

The research enquiry dealt with 25 lessons in general, but we have to remember that every single lesson was a composition of at least 25-30 educational events. Due to this fact the documentation of data includes:

- ❖ Hundreds of educational events videotaped with the video glasses.
- ❖ More than 50 micro-reflections collected from individual NQTs.
- ❖ More than 40 macro-reflections mediated by the expert mentors.
- ❖ Two or three meta-reflections that will hopefully, as a result of this research, generate a grounded theory or strengthen parts of other known theories.

In addition to the planned and focused data collection more background data was gathered from conducting other cycles of support in Oranim and also from the national survey. An illustrating demonstration of the hierarchy of data collection can be seen in the next figure:

Figure 4 - Hierarchy of Data Collection



### 4.3.2 Stimulated recall – Levels of Reflection

Man's singularity as a human being lies in his self-awareness and ability to criticise his thoughts, actions and behaviour. Man or woman by nature is a reflective creature, capable of being simultaneously both a thinking object – the '*self*' that acts, and an object that thinks – the '*self*' serving as an object of his thoughts. Since man is reflective, he criticises his actions, examines his thoughts, checks his ways of doing things and learns from his experience. Therefore, it is only natural that in a teacher's routine work, a considerable amount of reflection should take place. However, this is not necessarily so (Zilberstein and Ben-Perez, 1998). Zilberstein also mentions psychological and sociological theories that present reflection as a situation and explains it as a process. In the light of these theories, we can ask the research question in a different way: Can a supportive environment develop personal identification of situations and the perception of the participants of themselves, their self-awareness?

As professional teachers, NQTs must exhibit control of teaching skills<sup>60</sup> and expertise in the study material, be familiar with the educational objectives, and have strict control over the organisation of time and space of their class. In today's rapidly changing world, a teacher cannot afford to be impassive in his routine teaching work. New methods are required through external factors in order to be up-to-date, renew his objectives, methods and means, experiment with new programmes, and adapt to progress in a modern, technologically advancing world.

Without reflective feedback and being able to arrive at a high level of professional self-awareness, professional intelligent behaviour cannot be advanced. More than experience alone, reflection is what can enhance a NQTs' self-awareness, yet reflective thinking requires readiness, skill and time. Without a process of transformation, i.e., without reflective processing (Schon, 1987), real usable knowledge is not created, which is the main objective of PD.

Having the reflective feedback documented in different texts, two main approaches may be used to analyse them in general (Sabar, 2001), and texts documented using video in particular.

Subjective structural analysis – the relationship to the text is similar to an independent and closed unit<sup>61</sup>. The disadvantage of this structural analysis is that the

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<sup>60</sup> See Figure 2 –Dimensions in Teaching by Vonk (1993).

<sup>61</sup> Examples from anthropology, Levi-Strauss (1986) in which myths are examined based on their inner parts.

products remain within the structural field of the text and do not influence the world beyond it.

Objective interpretation – here the text presents things in the world beyond it. It is open to different interpretations and world outlooks. Meaning is imparted to these structures through role identification.

The two processes are involved in reflection, which conveys the knowledge acquired through personalising and localising knowledge. All the above processes are most effective when combined with critical pedagogy.

The main focus of the study is on the development of critical reflection and critical self-awareness among teachers. It is important to discern between the different levels of reflection in order to enable us to identify the differences and later foster them by using mediating guidance.

Van-Manen (1977) who found three levels of reflective thinking is useful to establish these differences:

#### Level 1: Technical Reflection

The main idea here is the technical application of educational knowledge to achieve goals that are considered to be desirable. No attention is paid to any theoretical system whatsoever or to the educational aspects of the class, the school, the community and society. No examination is made of objectives and goals. For example, on this level the use or non-use of positive reinforcement when checking homework would be noted (E 5- Shoshi) (E12 - Paz).

#### Level 2: Practical Reflection

In this type of reflection, an individual weighs the feasibility of providing alternative goals and possibilities by asking the questions '*Why?*' and '*What for?*' This level analyses and interprets theoretical assumptions based on the actions taken to fulfil pedagogical objectives. (E7- Michal)

#### Level 3: Critical Reflection

Such reflection relates to the objectives and the means required to fulfil them and determines whether the criteria are moral and ethical. The educational goals and contexts are considered to be problematic.

We examined and identified all the above three levels. While exploring those three levels, we defined and constructed in our study three stages in order to encourage both the NQTs' reflection and that of the Expert Pedagogical Mentors' (EPMs) supporting them.

### 4.3.3 Stages of Reflection: Micro-, Macro-, and Meta-Reflection

Using *stimulated recall*<sup>62</sup> to promote reflection in teaching is a new method. Using videotaping to stimulate this recall is even newer to reflection in teaching, and using video glasses in order to take these video films is, as far as I know, an innovation. This new technology is not only a tool and a strategy, but also provides a special angle of vision. The use of the video-glasses provides an opportunity for the reflective teacher to both concentrate on observing the pupils in his class and re-experience his teaching as directly recorded by the video-glasses; acting as his/her personal eyes – all this without another person being present in the class during the lessons.

In order to help foster self-awareness in NQTs, we constructed a three-stages process and used it several times in the expanded Action research, in a spiral way, to improve the dialogue that was taking place between the EPMs and NQTs.

The first step was to videotape a lesson, which would serve as basic documentation for the entire research. This first level of the reflection cycle was personal and basically intuitive. Every NQT was asked to watch the videotape, and write a short reflective review in which they answer the following questions:

What was the single best aspect of the lesson and why?

What was the single most disappointing aspect of the lesson and why?

What was one thing you could do next time to improve the lesson?

The structure of the study was a complex of a repeated process. Every process included the three stages of reflection, described in figure 5, and was considered as one cycle of reflection. During the induction year, this cycle was repeated 4 times as illustrated in figure 6.

Through the different phases of the study I tried to find ways to optimize the potential of the video-glasses. The basic data accumulated from the educational events, derived from one or two lessons, videotaped with the video-glasses. After this data was collected a spiral process began and each spiral was repeated 3-4 times during the first year of teaching (see figure 5 and 6). NQTs had to go back to their's *stimulated recall* at least 3 times in every spiral and had more then 10 opportunities to reflect on their teaching activities during this special year.

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<sup>62</sup> Re-use of recorded material to focus upon teaching activities.

Figure 5- Details of A1, A2, A3, A4  
To Figure 6

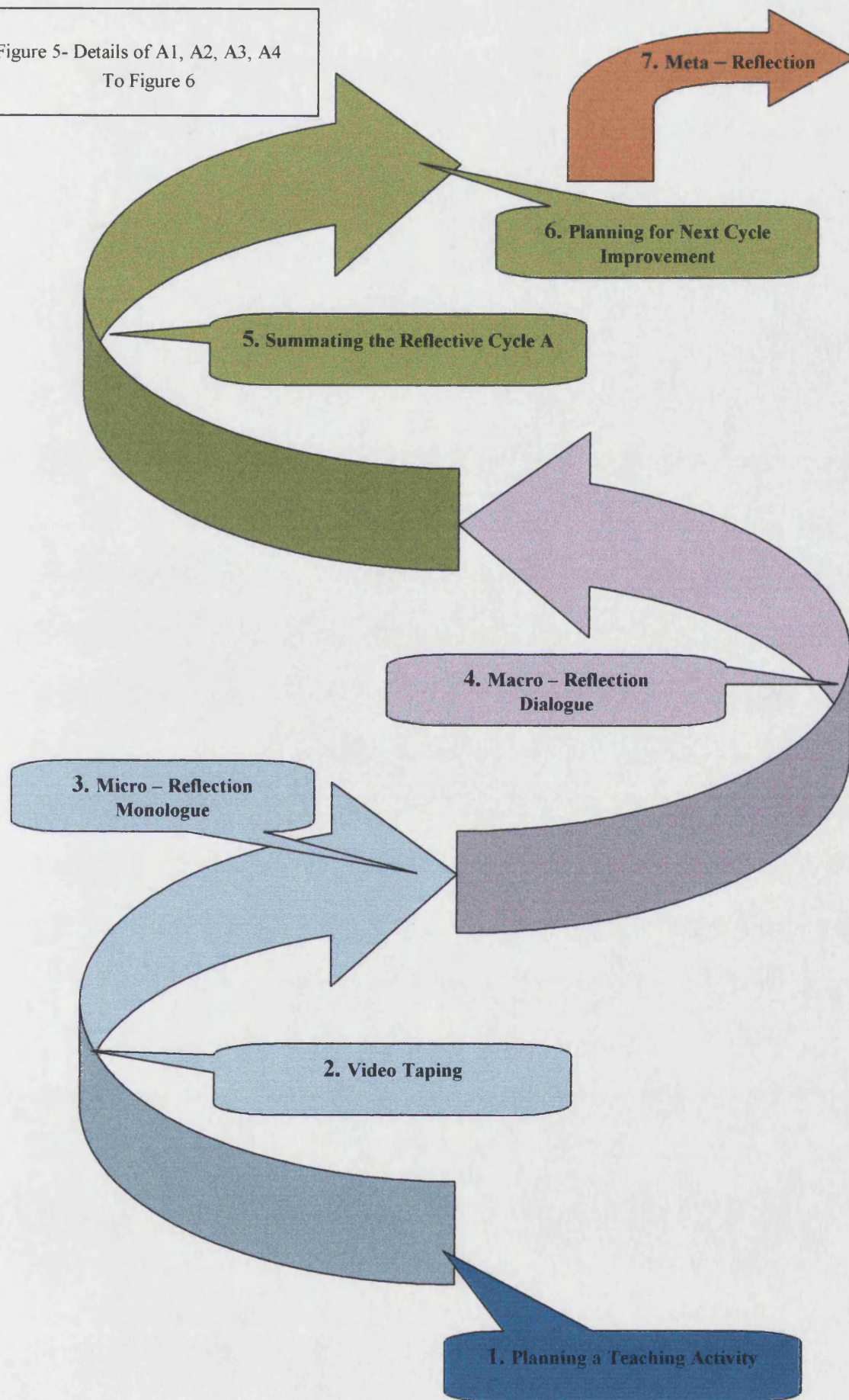
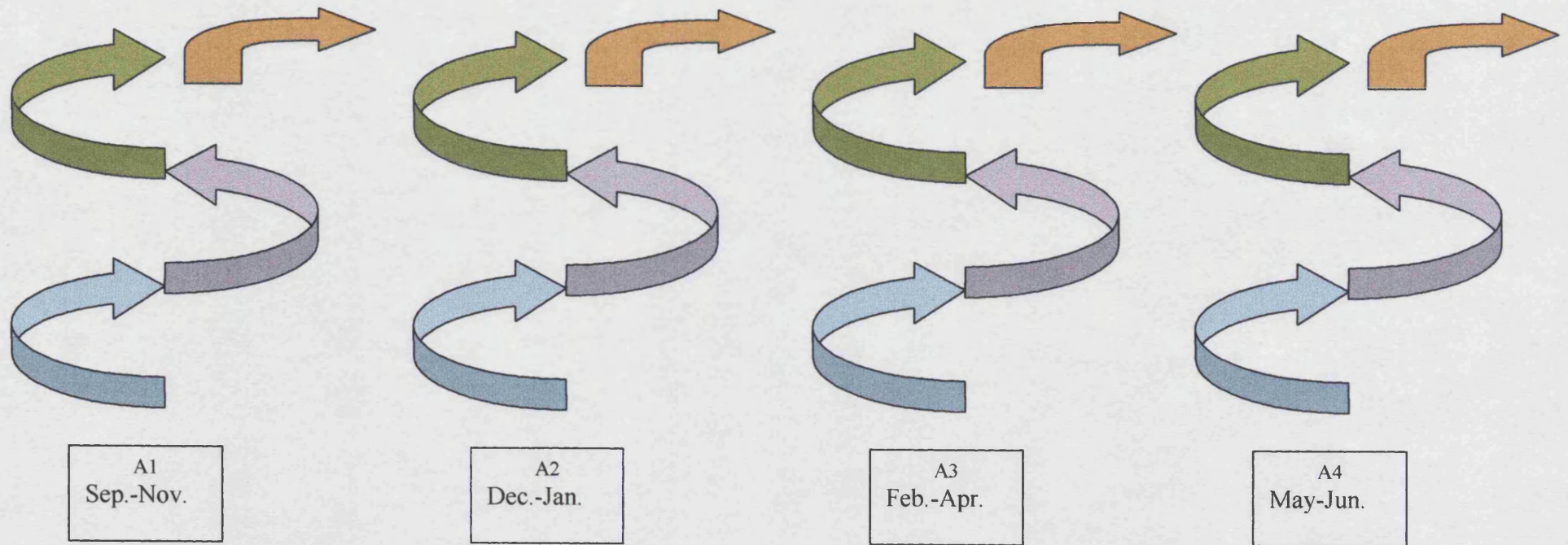




Figure 6 – Cycles of Reflection in the Induction Year



At the micro-reflection stage, every participating NQT planned a usual lesson<sup>63</sup> and videotaped it with the video-glasses. When watching it, she/he wrote a reflective monologue.<sup>64</sup> The personal written reflections of the NQTs were made without any mediation, as monologues and the level could be technical, practical or critical, depending on the abilities, openness and critical disposition of each teacher<sup>65</sup>.

The second stage was the macro-reflection stage; the EPMs and the NQTs watched together the recorded lesson and discussed the events mentioned in the monologue. The NQT lead the reflective dialogue, mediated by the EPMs. Here, too, Van-Manen's three levels could be applied and emphasis was placed upon critical reflection<sup>66</sup>. The NQT's writing<sup>67</sup> and planning for improvement for the next cycle, summated every cycle of reflection.<sup>68</sup> A profound pedagogical knowledge is required of mentors who seek to assist NQTs in this process. Without such knowledge EPMs cannot quickly reformulate the goals of the reflective interview or map the NQTs' conceptions of interaction in the ZO-PED.

At the meta-reflection stage<sup>69</sup> the EPMs together with the principal researcher, analysed clips from the videotapes, the micro-reflection texts, the macro-reflection and the material collected from the interviews. At this stage, emphasis was placed on the prior reflections (micro and macro), and the reflective thinking was critically analysed. Other documentation, from other cycles of support, were triangulated and generalized<sup>70</sup>. All the participants at the meta-reflection stage were members of the induction project management team.

To summarise the structure of collecting data, I want to emphasize that it was a self-selected sample. The people involved in the induction project in Oranim consisted an average of about 172 NQTs annually<sup>71</sup>, about 10 experienced pedagogical mentors (EPMs) who ran the weekly workshops, and one project facilitator who enabled all the support cycles to develop and take the necessary action. The Action research included 14

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<sup>63</sup> She/he was recommended to do so for the benefit of learning to reflect on an usual teaching situation

<sup>64</sup> Examples in chapter 5

<sup>65</sup> Demonstrating examples in chapter 5

<sup>66</sup> Illuminating examples in chapter 5

<sup>67</sup> Sometimes it was an open interview that summated the cycle of reflection.

<sup>68</sup> An usual process in every action research.

<sup>69</sup> Painted in orange in figure W and in figure XX

<sup>70</sup> All the participants at this stage had additional roles in the induction project and were responsible for two or more cycles of support in the Oranim model

<sup>71</sup> The national educational program includes a total of about 1,500 NQTs every year.

NQTs using the reflective recording strategy with the video-glasses who underwent the reflective cycle process 3-4 times annually; 2-3 EPMs mediated the professional development of these NQTs, and one research coordinator acted both as the principal investigator and the writer of this thesis.

#### **4.3.4 Monologue, Dialogue and my Research Diary**

The data were collected from these three sources taking into account the spiral accumulation. Each spiral was composed of one case study, beginning with the video-taped lesson in class or kindergarten, using the video-glasses and continued as follows:

1. Independent planning of the lesson by the NQTs in the natural environment.
2. Full documentation of the teaching activities using video-glasses.
3. First stage of processing documentation through observations and reflection. This represents the personal stage – micro-reflection and writing a reflective monologue.
4. Second stage of processing documentation: repeated observations with mediated reflection by the EPM. This represents the macro-reflection stage and the dialogue was audio taped or written.
5. Contemplating the change required to solve the problem or difficulty. It is optional to employ discussion in a group of peers. Writing a conclusion reflection by the NQTs closes every spiral.
6. Third stage of processing documentation. Repeated observations of all the previous spirals by the principal researcher and the expert mentors – meta-reflection.
7. The entire process was repeated 3-4 times during the Induction year.
8. Research considerations: Deciding whether to expand the database and investigating the focus of the research while considering changes.
9. Triangulating data with documentation from other cycles of support for a general orientation.
10. Analysing data, organizing, mapping, looking for patterns and interpreting findings. Drawing conclusions about innovative tools and



strategies as well as finding dimensions of professional development considering the time axis<sup>72</sup>, and concerns of teachers<sup>73</sup>.

#### 4.4 The Process of Data Analysis

This research enquiry, wishes to provide and explore a framework within which the teachers can analyse their classroom teaching and solve problems. They are presented with a professional learning process model that aims at '*meaningful learning*' from experience, becoming a '*reflective beginner*'. Using a pre-ordinate design was purposely avoided and the design that emerged was preferred in its place.

In the research enquiry each participant was expected to analyse the data and interpret it, as well as carry out in-depth examinations *over a continued period of time*. Active presence in the setting of the study provided insights not available to '*outsiders*' who can only be peripherally present. This is termed as the '*Emic*'<sup>74</sup> approach, in which an '*insider*' explores data and conducts content analysis, but there are obvious limitations, problems and strengths in this approach. In the following chapters some examples of the problematic character of using data to clarify and understand key problems will be presented. We will consider the situation more complex because there are contradictions regarding the *inside/outside* approach.

57 lessons<sup>75</sup> were recorded and the documentation on the three stages of reflection accumulated over the three years of research in 320 pages. Here I will give details of both the content and use made of the documentation as well as that of which I made no use:

- 18% of the documentation was about the induction team's meetings.
- 19% was the research diary that documented and accompanied the research.
- 9% were the transcripts of open interviews with 14 NQTs
- 54% (32 lessons) were reflections from which 95 *events* were selected, mainly by NQTs, and upon which I mainly base the research. This documentation ending up in about 190 pages:

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<sup>72</sup> Considering the induction year as the proximal zone (ZO-PED) for professional development.

<sup>73</sup> Fuller (1975).

<sup>74</sup> See terms on p. 2

<sup>75</sup> 25 in the pilot study and 32 in the research enquiry.

- 20 pages of reflective monologues by NQTs.
- 37 pages of dialogues for the documentation of mediated discussions for reflections written by EPMs.
- 12 pages that summarize the cycles of reflection written by the NQTs.
- 50 pages of email correspondence.
- And the rest, about 70 pages of an Internet forum that was used by the NQTs for general anonymous support<sup>76</sup>.

Such a great deal of data creates problems of organizing, analysing, searching for patterns and discovering important issues that can teach us how the NQTs reflect on their teaching activities and how they can be promoted to the critical level and self-awareness. To overcome this we expanded the Action research several times in different ways.

The pilot study and consequently the main research provided a framework within which NQTs could analyse their classroom teaching and the EPMs could empower them to solve practical problems, whilst professional learning strategy was presented. All three levels that Van-Manen (1977) described were identified and improved ways to promote NQTs' reflection were developed.

What documentation *did I not use* in this research:

The documentation of the team meetings I only used in the third phase of the research on Educational Management and, in the present research, this documentation was used only as background and context for understanding. I made very little use of the research diary in marginal notes and for explanation in few sections in chapter 8.

I only used the open and informal interviews to cross reference information with what was obtained in the induction workshop and in the process of the reflective videotaping. Two out of the 25 lessons were not given to us for observation<sup>77</sup>. In any case it turned out that *I didn't use* most of the material taped with the video-glasses since there are hundreds of educational events there. In the present research I only used 95 events selected by the NQTs for the purposes of reflecting upon their work. The selection of events was only rarely made by EPMs (only 5-6 times) as a result of needs that arose in the reflective dialogues. In all other cases the NQTs led the process and were those who chose what was to be focused upon and discussed.

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<sup>76</sup> The material is still accumulating and this will be used in subsequent research.

<sup>77</sup> Since we left the decision to them whether to choose to participate in learning about the strategies of reflective thinking or not.

Obviously all of the documentation has been done in *Hebrew* including the analysis and the triangulation that was done when the material was still in *Hebrew*. The material was translated into English only after the analysis, when the examples were chosen for exemplification, explanation and illustration.

The steps in this Action research are similar to those of other types of research except for the fact that here the problem or topic are identified and chosen by NQTs and reflections carried out to improve teacher's practice.

This qualitative approach emphasises the need to understand the context of each videotaped lesson and necessitates participants becoming practical researchers, without going too deeply into theoretical considerations. The EPMs conduct the Action research, collaborating with NQTs to decide *when* and *how* to extend the range of inquiry or select a new focus for further observation. The study is concerned with identifying and exploring the perspectives of all the above.

While we used both '*Subjective structural analysis*'<sup>78</sup> and the '*Objective interpretation*'<sup>79</sup> in the dialogues with NQTs, different kinds of dialogue appeared in the study, examples of this are: dialogue between the teacher who videotaped and the videotape<sup>80</sup>; dialogues between NQTs and the EPMs as they both watched the videotape; and dialogues between the three researchers, who watched the videotape and read the macro-reflection documented texts.

#### 4.4.1 NQTs' Perspective

Two principles we kept in mind: a close-to-practice approach, and a teacher's professional development as viewed from an individualistic perspective. We appreciated the opportunity to investigate '*patches of profession*' of NQTs. We discovered a new whole world of stress, concerns, problems and dilemmas but full of fresh energy, ability and knowledge. In terms of the research cycle, we worked intuitively during the first stage of this Action research. Only later did we read more professional literature and discussed the subject with experienced researchers<sup>81</sup>. We dealt extensively with attempts

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<sup>78</sup> The structural analysis of texts (Levi-Strauss, 1986) is apparently a preliminary condition for their proper understanding, but is only the first level in the mediating process between their *objective significance* and the possibility of additional interpretations.

<sup>79</sup> Using hermeneutic methodology through the analysis.

<sup>80</sup> Other levels of joint observation may be added: the teacher with his pupils or with a colleague.

<sup>81</sup> For this I would like to thank Prof. Bolam, Prof. Zilberstein, and Prof. Sabar Ben-Yehoshua.

to combine between objective significance of the *structural analysis*<sup>82</sup> and subjective interpretation about different events that were videotaped and documented. Whilst the study developed, parts of NQTs' tacit knowledge became more visible and explicit.

#### **4.4.2 Expert Pedagogical Mentors' Perspective – Meta-reflection**

The second stage of the reflection cycle took place after a specified period of time, few days or a week and was mediated by an EPM. Together with the NQT they watched the videotaped lesson and tried to determine whether there are patterns of strengths and weaknesses. It was a general dialogue, raising educational teaching principles. The purpose was to mediate towards a higher level of reflection, if possible, the critical level and to promote the NQTs self-awareness and by this enhance their PD.

The expert mentors, together with the principal researcher observed clips from the video films, the micro-reflection texts, the macro-reflection texts and the material that was collected from the summing interviews. At this level, emphasis was placed on the prior reflections, and thinking about reflective thinking was made in a critical fashion, we called it meta-reflection.

There too, Van-Manen's three levels could be expressed. Attention was also to the potential of increasing teachers' *repertoire* of instructional strategies by implementing new practices to overcome problems (Airasian and Gullickson, 1997).

#### **4.4.3 Coordinator's/Researcher's Perspective**

The research diary is a record of the researcher's involvement in the project or in the research enquiry. While the contents of the diary are sometimes used as data, they are different from the information, documentation, observations, records or other data, which are collected because of the possibility that they may yield information about the phenomena under study. The diary contains information about the researcher, what the researcher does and thinks as well as refers to the process of research. It has the potential to complement data yielded by the research methodology.

Researchers use the research diary as a tool to reflect on their own research practices. In our study, the research diary is an important tool in this Action research, dealing with reflections and in which there are co-operating participants. Here too the

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<sup>82</sup> For example, starting out with an interesting opening to a lesson, or using didactic aids in teaching.

*inside/outside* approach with all the contradictions enlightens the complexity of research into living situations and activities.

I wrote the diary almost every week for the last two years<sup>83</sup>. Sometimes I used a notebook but usually a floppy disk with nothing thrown away and everything written concisely. I intend to use part of this as a record of my developing thought and action, reflecting on every stage of the study. It can also be useful for cross-referencing to other sources of documentation and for my additional reflection in chapter 8.

#### **4.4 Ethical Issues**

By concentrating on the research questions, the study strives to provide an accurate description of the phenomena of promoting self-awareness and tracking the dimensions of professional development of NQTs. It stresses for reliability while respecting the ethics of privacy and responsibility. This means that nobody was forced or manipulated into doing anything they felt incapable of doing. In fact, the NQTs had the possibility of leaving the research and making autonomous choices whenever they came to a crossroad. This approach places '*research subjects*' at the level of participating researchers since they are the ones studying the preliminary stage<sup>84</sup> at which reflection takes place.

The perspective of the research is hermeneutical, an approach wherein human experience is mediated and context-dependent. This leads to special methods, different tools and consideration of many ethical issues.

In regard to the common ethical issues of voluntary and self-selected participation, participants not only remained anonymous but they had the right to withdraw from the study at any time. Honesty and openness, and a feeling of being colleagues characterized the relationships between the EPMs and the NQTs, and that was confirmed in many open and informal discussions.

As for the videotapes, we received permission from two of the NQTs, to use the actual recorded lessons for research. Another two NQTs from the 25 decided to *withdraw* after the first videotape and took the recorded lesson home with them. Rethinking the problem of permission we came to the conclusion that it was not enough to ask permission from the NQTs alone since the video glasses do not expose the teachers but focus on the pupils in the classroom. It is almost impossible to ask

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<sup>83</sup> Only after three years of coordinating the Induction program the idea was recommended to me.

permission from every recorded pupil and after some consultation, we decided that it would be legitimate to use all the recorded lessons and analyse the texts with the different stages of reflection, on condition that the tapes, except the two lessons with full permission, would never be screened in public but only used for the collection of data for research purposes. This is possible because the object of our research are not the class pupils but the reflective process that takes place in NQTs' minds and thoughts when *viewing* their own lessons.

## 4.5 Triangulation – Cross Referencing

A qualitative constructivist research, as is presented here, seeks reliability by pointing to personal responsibility, the ethics of concern, patterns of constancy in a text, triangulation and cross-referencing with different sources of data. My sources were: the reflective monologues, reflective dialogues, informal and formal interviews and my research diary.

The key questions investigated with the help of this research design were explored in different activities and with different tools.

We collected feedback from the NQTs throughout the entire period in order to crosscheck the information with national documentation, which was always available in addition to local documentation<sup>85</sup>. In this way we could monitor and evaluate the different aspects of the program: job placement, roles of educators in the field, evaluation methods and rewards. The national survey included a large representative sample of about 400 NQTs out of 1,500 graduates<sup>86</sup>.

The world of NQTs as revealed to us during the implementation of the Induction policy in Israel was our fundamental source of information. The rich data was accumulated from the repeated cycles of reflection with the strategy of mediating reflection stimulated by the recorded lessons with the video-glasses. Additional data was available to the researcher from the other cycles of support, namely the weekly

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<sup>84</sup> The micro-reflection, as described in section 4.3.1

<sup>85</sup> Notes and protocols from meetings of the National Induction Coordinators Forum from 43 teacher training colleges and two universities; the latter is still in an experimental period.

<sup>86</sup> This survey shows: 37% do not begin to seek work in the teaching profession for various reasons. Of the other 63%, interested in working in education, only about half are placed in schools approved for Induction and many others are placed in informal educational work that is not yet recognised for Induction needs.

workshops, the Internet website and forums, the expert mentors' reports and sessions of the management team<sup>87</sup>.

The tools and means included in our data collection and analysis were: The videotaped activities, reflective monologues, recorded and written dialogues, summing papers for every cycle of reflection, informal free conversations, virtual attending to professional forums on the website and all the documented meetings. The different sources of documentation were used to triangulate the findings and to explore the research questions. A part of this cross-referencing process was intended and planned but another part was not and this happened because in some cases, the same people who conducted the weekly workshops responded to the forums questions and individually supported every NQT who asked for it also mediated the reflective cycles. They themselves integrated almost all the cycles of support that existed in the Induction program that served as background and context for the Action research.

This holistic approach has some advantages, since cross-referencing is virtually built-in; but there are problems associated with it for the subjective viewpoint can cause difficulties regarding the research questions, analysis and the necessity to arrive at generalized conclusions. Nevertheless I intend to provide in the next chapter positive support for the different factors that were investigated in this thesis. I hope that the text above and the findings below are sufficiently transparent, present the developing themes and show the scholarship gained through the process.

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<sup>87</sup> See details in the context of the research – chapter 3.

## 5. Findings – Hermeneutic Interpretation

What teachers do and say communicates what they believe and think, and the very doing and saying reinforces the belief and the way of life and professional development it inspires. Concentrating on the research aims and objectives, I will strive to determine a strict definition of the phenomena being studied and seek reliability according to the ethics of personal concern and responsibility. The multitude of voices in a text, the dialogue with the research subjects and the possibility given to them *to lead the study and make a choice when they come to a 'crossroad'*. This approach places 'research subjects' at the level of participating researchers since they are the ones studying the preliminary stage<sup>88</sup> at which the first reflection takes place. Our concept of exploring and evaluating the complexity of teaching activities was in most cases opposite to the formal assessment process<sup>89</sup>, where formalities of the Ministry of Education dictated the universal approach.

After the first experiences, the NQTs assured, and we, the EPMs were able to see in the recorded lessons, that the video-glasses didn't have an impact on the classroom dynamic; the pupils got used to it after few moments and they acted naturally.

The perspective is Hermeneutical, whereby human experience is mediated and context-dependent. This leads to special methods, different tools and many ethical issues. In the next sections we will define patterns in selected events and anticipate why and how they will help us answer the research questions. We will explain the data by mapping and organizing a nine-cell matrix.

The essence of a qualitative research lies in the interpretation and search for significance in a world of complex phenomena. An Action research is not a research stream in the accepted sense<sup>90</sup>. The study has a practical approach, suitable for professions such as teaching and social work, as well as other areas dealing with introducing change. It explores and enhances professional self-awareness of NQTs and finds the significance they afford to their new reality as independent teachers.

Using stimulated recall and using video-glasses in order to take these videotaping is an innovation. This new technology is not only a means; it also has many benefits since they provide an account of a lesson, which is entirely from the teacher's viewpoint. It

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<sup>88</sup> The micro-reflection, as described in section 4. 3.1

<sup>89</sup> During the induction year all NQTs had to pass a formal assessment divided in two parts, the first a formatting assessment and the second, a summing one.



differs from the traditional video methods<sup>91</sup> that represent either the technician's account by providing focuses on different events in the lesson; or a fixed view, if the video is left in the same position throughout the lesson. In either case the traditional methods provide a recorded lesson removed from the teacher's true perspective and interest. The lesson recorded by the video-glasses is a second opportunity for the teacher to concentrate on the pupils in his class since they are in the direct focus of the pictures, as well as enabling making a full recall of his teaching – all this, without another person being present in the class during the lesson.

Teacher perception, representation and self-awareness are key issues in the process of this Action research. The main issues include understanding and mediating a certain reality of what happens in a class in order to learn from and act upon it.

In order to promote self-awareness, I built a three-stage method and used it in the expanded Action research, several times, in a spiral way, improving the dialog with every repetition.

At the micro-reflection stage: The first step was to videotape a lesson, after the videotaping, which serves as a basic documentation for the entire research, personal written reflection was made without any mediation. The level could be technical, practical or critical.

This first level of the reflection cycle was personal and almost intuitive. Some examples from the reflective monologues will demonstrate what we gained from this first stage of reflection:

E27 –ZAP is a Nature teacher and, in her monologue, she specifically speaks about her goal to '*form knowledge*' in her pupils. After the first observation she writes: "*I didn't know I was so up tight during the lesson; I can hear in the recorded voice that accompanies the work that I am under pressure...I was really unaware about it until I saw the videotape... "*

E71 – LAMI observed the recorded lesson group work that she had planned and carried out in grade 4 on the subject of '*colors in nature*'<sup>92</sup>. She reflected technically on the

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<sup>90</sup> See definition in the first page after the cover and in Ch. 2.

<sup>91</sup> Traditional Microteaching, for example.

<sup>92</sup> More about this event is described in the following pages when explaining the reflective dialogue.

group-work that she conducted and mentioned some practical reflections and even suggested two critical comments.

E43 – MAI is a teacher who is self-confident and, in the monologue, one can see that she feels good about navigating the class. The subject is 'winter' and the opening of the lesson arouses curiosity in the class. She prepared work material and exercises for each group. During the first minutes of the reflection she already notices that the distribution of the material is taking too long and, in the meantime the pupils are restless. *"I didn't organize things well enough...I put a lot of effort into the work but I should have prepared organized piles according to groups... In the videotaped lesson I see that one group only contains boys...they do not listen to instructions...I think I may have given them too difficult a task...but in general the lesson was good and interesting...the headmaster walked in and was impressed by the work done, the materials (winter clothes, photographs of clouds, umbrellas, heaters, migrating birds, including cataloguing exercises). She asked me to make a presentation of the results in the school corridor so that all the classes could see them...I am definitely satisfied..."*

E88 – TAMI writes in her monologue after reflecting on the recorded lesson... *"Nothing succeeded; I wanted them so much to be interested, I tried to activate the children, to move them out of their seats, that is to get them to be active and to try out all sorts of scientific experiments...I prepared lots of materials on trays... when I allowed them to get up and take the materials I saw that there was a big mess... it was what I felt when I recorded and conducted their learning, but now, in the video tape, I also see that they worked quite well ...at least part of them... so not everything was a catastrophe like I had thought..."*

In that first stage of reflection most of the monologues do not demonstrate more than the first two levels of Van-Manen, the technical and practical level and sometimes it was only a description of the lesson, only reporting about what happened.<sup>93</sup>

At the macro-reflection stage: The second stage of the reflection cycle took place after a specified period of time (a week or two) and was mediated by an expert mentor. Together they watched the videotaped lesson and tried to determine whether there are

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<sup>93</sup> According to the 5 levels of reflection described by Bain (1999)

patterns of strengths and weaknesses. It was a general dialogue, raising educational teaching principles, dilemmas and alternative approaches.

There too, Van-Manen's three levels could be expressed. Attention was also to the potential of increasing teachers' repertoire of instructional strategies and methods by implementing new practices and several alternatives to overcome problems (Airasian and Gullickson, 1997).

I can illustrate here with some reflective dialogues which conceptualises the mentor's empathetic role:

The autonomous work and the reflective monologue are not enough. Without theories and ideas that match up and connect between sections of practice this can, at best, be a technical or practical reflection and wither into a collection of cases of active approaches based upon experience and becoming routine and a part of teaching techniques. The EPMs tried to make critical reflection the center of things through mediation. Being aware of the disagreement about the term expertise, I will continue to use Schon's definition (1983) that removes the all embracing authority from the expert teacher and replaces this definition with the definition of the teacher as a professional with doubts and questions who is in a continuous process of learning. This brings to light the benefits of the special strategy demonstrated in this study for the EPMs and not only the NQTs.

The dialogues presented here are the result of the expanded Action research in which the mediator-expert encourages critical reflective thinking in the NQT. With the development of reflective thinking new understanding will come in the process of his praxis. The dialogue is based upon the identification of the actual level of the teacher and his/her progress towards self-awareness, the use of existing professional knowledge and independent professional development during the dialogue. By this we encourage them to try and make their tacit knowledge more explicit.

E71 – In a reflective dialogue that took place during the observation of Lami's lesson we, the two mentors, and Lami herself, noticed that there were things that repeated themselves in the lesson...she gave a lot of reinforcement, and this was good, she explained and repeated the instructions with great patience...she responded to both correct and incorrect answers...when we continued observing together Lami, herself, noticed her reaction to a certain pupil's answer...the question was: *"Which animals use their colors for camouflage?"* And the same pupil put up her hand and said that her

father had a brown colored dog who blends in well with the surroundings... the class was a little noisy at that time... two children laughed at the answer and Lami said: *"I want relevant answers!"* In the re-observation with us she stopped the videotape and said: *"I feel I behaved tactlessly with that girl...she was trying very hard to take part and function...I know her father lives alone (without the family) in a neighboring settlement and that she only visits him rarely...I should have related to her more nicely when she told us about her father's dog..."*

E11 – The videotape shows a fifth grade literature lesson and, in her reflective monologue, Rona writes: *"It was a terrible lesson; they didn't let me teach; it was noisy all the time; everybody talked and chattered; there really isn't anything to see here and nothing to think about..."* When we anyway, after her agreement, observed the videotaped lesson, and she the NQT was very frustrated, my colleague, Ada<sup>94</sup> noticed that there were several quiet moments during the lesson...*"What do you think about dwelling on these moments when the class was quiet and you tell us what happened then; what caused them to be attentive."* So we stopped there and Rona said: *"During these moments of quiet I simply changed subjects and read them a short poem so that, afterwards they could read it by themselves and analyze the content in groups...during these moments they were curious about what was going to happen...maybe my lessons really aren't interesting enough, not stimulating enough...maybe I should devote more time to preparing and planning the way subjects flow from one thing to another...to try and make them more intrigued and motivated...from the videotape I can see that this is possible, that ,in fact, this is what I did for a few moments but I just didn't pay any attention to it..."*

E95 – One can see a large number of discipline problems in ILA's lesson...I, the expert mentor having a reflective dialogue with her, try to make my mind up about whether to talk to her about what is causing the discipline problems...corrective treatment for the problem...I am not sure whether it is methodically correct to draw her attention to all the aspects...her monologue didn't mention these problems...one needs to be patient and see what she herself is aware of...this has more value...and she chose to deal with this only indirectly; during the second observation of the videotaped lesson she comments that she noticed that the video-glasses, the camera mostly focused on the right side of the

class..."*All of a sudden I saw that I was hardly looking at the left side where there were two groups working quietly...I was busy with one group on the right side for the whole lesson because they were disruptive all the time, thus I see that I was virtually teaching only them...*"

With the help of this example we can demonstrate how the video-glasses provide a better evidence source than traditional video. Further on she also raises the issues of discipline by raising the problem of latecomers to class..."*I have to find a way to deal with latecomers... what to do with them afterwards – or perhaps even better, what to do with them beforehand, so that they won't come late...perhaps another talk about discipline will help... but I've already talked to them and it didn't help...*" It went on, and I, the EPM, by being patient and listening, was witness to her becoming self-aware of her tacit knowledge and her concerns becoming more visible and explicit.

At the meta-reflection stage: From the previous phases of research emerged the process that dictated that only the EPMs and the researcher practiced this stage of reflection in this study. In chapter 8 I will recommend for future research to involve the NQTs more in this important stage. The expert mentors, together with the principal researcher observed clips from the video films, the micro-reflection texts, the macro-reflection texts and the material that was collected from the formal and informal interviews. At this stage, emphasis was placed on the prior reflections, and thinking about reflective thinking was made in a critical fashion.

Almost all the interactions of the induction team can be considered as parts of the meta-reflection, we were reflecting on our reflections with the NQTs. Conducting this study and writing the thesis, using the Action research methodology, is based on this stage of meta-reflection. This meta-reflection stage is the most interesting insight that emerged from this study, but only the EPMs gained knowledge from this stage, it was not yet extended to the NQTs, and it is planned for future research.<sup>95</sup>

Is it not also desirable for the EPMs to carry on the same reflective dialogue that corrects itself while it is going on and also draws conclusions about the needed changes?

According to Schon (1987) reflection is similar to '*a hall of mirrors*' inside of which reflective teaching, from which others can learn, is demonstrated. Both reflective teaching and reflective mediation are kinds of in *practice research*. The performance is

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<sup>94</sup> She is the expert pedagogical mentor, working with me on mediating reflection to NQTs.

expressed in the ongoing work of the participant. The construction of his knowledge through this work is the basis for the inter-relationship with the mediator and the expert, who can also be a researcher.

Every time we, the two and sometimes three mediators, met we raised the principles that came up in the monologues and dialogues, but we also thought a lot, and critically, about what we could improve in these inter-relationships and how our contributions could improve.

The study, lasting almost three academic years, was designed practically in response to the NQTs' immediate needs as they were revealed to us in the weekly workshops, the forums on the website and in other free conversations. The importance of mentor-teacher-pupil interaction was emphasised and served to promote reflection and self-awareness.

We used both the '*Objective structural analysis*' and the '*Subjective interpretation*' in our dialogue with the NQTs. Different levels of dialogue exist in the study: dialogue between the teacher who videotaped and the product, which is the videotape<sup>96</sup>; dialogue between NQTs and the expert mentors as they both watched the videotape; and dialogue between the three researchers, watching the basic videotape and reading the macro-reflection documented texts.

The structural analysis of texts (Levi-Strauss, 1986) is apparently a preliminary condition for their proper understanding, but is only the first level in the mediating process between their objective significance and the possibility of additional interpretations. The main focus, on what to reflect, was a decision made mostly by the NQTs, we, the mentors responded to their choice and expanded it when needed.

Regarding the research cycle, we worked intuitively during the first stage of this Action research. Only later did we read more professional literature and discuss the subject with experienced researchers<sup>97</sup>. We dealt extensively with attempts to combine between objective significance of the structural analysis<sup>98</sup> and subjective interpretation about different events that were videotaped and documented.

Only at the end of the pilot study we could see the research structure that emerged with the three reflection stages described above. Even after we had arrived at this combined and complex structure, we still dealt with additional clarifying questions by

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<sup>95</sup> More details and possible improvements are proposed in chapter 8.

<sup>96</sup> Other levels of joint observation may be added: the teacher with his pupils or with a colleague.

<sup>97</sup> For this I would like to thank Prof. Bolam, Prof. Zilberstein, and Prof. Sabar Ben-Yehoshua.

videotaping once again, holding interviews, and finding new insights during the present interpretative stage. In order to organise and analyse such a great deal of data, searching for patterns, discovering important issues that can teach us how the NQTs reflect on their teaching activities, I planned a simple matrix.<sup>99</sup>

The steps in this Action research are similar to those of other types of research. The difference lies in the fact that here the problem or topic was identified by the NQTs' reflection carried out while watching their lessons and is used to improve the teacher's practice. This qualitative approach emphasises the need to understand the context of each videotaped lesson. Therefore, in this case, all the participants are partly researchers. The NQTs were participant researchers and the expert mentors lead the Action research, collaboratively deciding *when* and *how* to extend the range of inquiry or select a new focus for further observation. The study is concerned with identifying and reporting the perspectives of all of them.

If the discussion was in-depth and the dialogue was developing, new questions were asked and certain generalisations were brought up for consideration at the different reflection stages. The validity and reliability of the study's beginning are pushed aside by new perceptions and insights, and the dialogue becomes more complex and problematic. As Sabar Ben-Yehoshua (2001) already said:

“The journey itself during dialogue is half the fun. The long-term implications of the dialogue will create, over time, a legitimate variety of methods that will increase our understanding of educational subjects.” (Sabar, 2001; p. 55)

Each participant analysed the videotaped data using interpretive and writing skills according to the level of reflection that she/he was able to do, as well as carry out in-depth examinations over a continued period of time. Being actively present on the setting of the study provided insights not available to ‘outsiders’ who are peripherally present. This is identified as the ‘*Emic*’ approach. In the following pages there are some examples of using data to clarify and understand findings. As for ethical issues, as declared before, participant not only remained anonymous but they had the right to withdraw from the study at any time. The relationships were characterized by honesty and openness, we felt colleagues.

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<sup>98</sup> For example, starting out a lesson with an interesting opening, or using didactic aids in teaching.

<sup>99</sup> See diagram 3

Ruth Zozofski (1999) compares the role of expert mentors to that of a '*midwife*' for the reflective processes among teachers. The strategy of reflective dialogue is based on Vygotsky's "*zone of proximal development*." The expert mentor identifies the NQTs' level of self-reflection and presents the NQT, using comments and questions, with the estimated potential level to which he is striving to achieve. Perhaps not always the EPM can identify the exact level but it is possible to correct the pedagogical and educational judgment on the spot. During many of our meetings and conversations about the reflective videotapes, NQTs first learned to listen to them-selves and only afterwards were able to listen to their pupils. Thus, reaction teaching depends upon self-reflection and self-awareness.

Mediation and guidance are essential, but apparently not enough for bringing about significant changes in PD. Additional factors could also influence the results, such as tolerance to situations of imbalance, a habit of monitoring and evaluating constantly and the quality of interactions that teachers have with their environment.

The main contribution of the study lies in the fact that it represents a first attempt to mediate the different levels of critical reflective thinking, to discover evidence of the influence of this mediation, and to improve the reflective ability and self-awareness of NQTs and expert mentors as well. Consequently, domain of experience, including the domain of education research and theory, come to be thought about in particular ways. Before discussing more of the findings I will illustrate with the help of few examples, the phases that the NQTs underwent during their first year of teaching. Following those phases will enable us the holistic perspective that we need in order to understand the beginning of PD in the induction year.

## **5.1 Phases in the Induction Year**

NQTs' perceptions, concepts, concerns and self-awareness were key issues in the reflective monologues and dimensions of professional development were key factors in the dialogues during the mediation process. The main issues included the understanding and mediating of a complex reality that had taken place in a class in order to learn from and act upon it. The most basic and important findings were the fact that



teaching/learning activities are far more complex than is exposed in literature and guidebooks for teachers.

First-year teaching is a difficult challenge but equally challenging is figuring out ways to support and assist beginning teachers as they enter the profession. Supporting the efforts of new teachers in their day-to-day interactions has led us to notice a number of phases that NQTs go through in doing their first year of teaching.

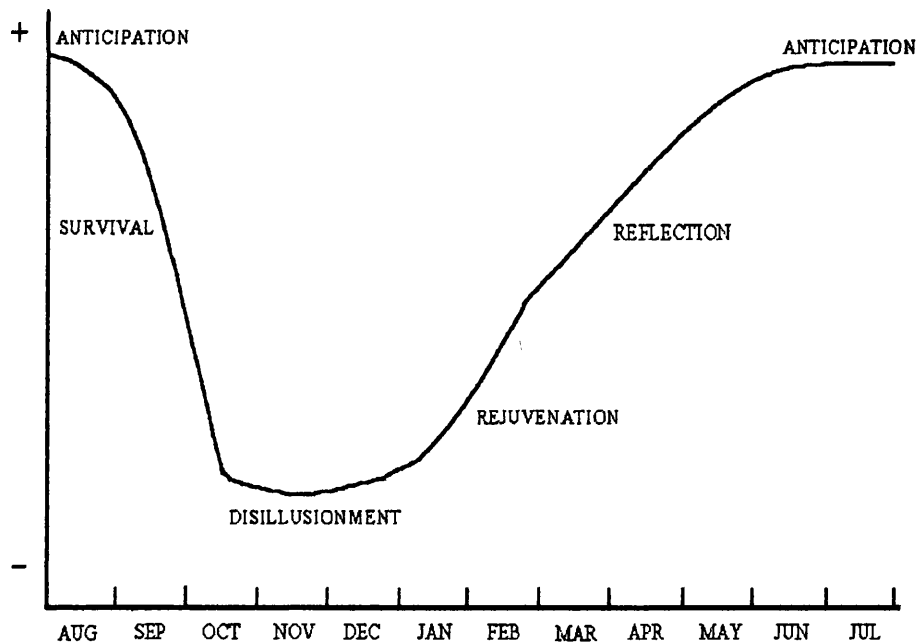
According to Ellen Moir<sup>100</sup> the NQTs move through the phases of *anticipation, survival, disillusionment, rejuvenation, reflection*; then back to *anticipation*. In Israel we also found the same phases in this crucial first year. While not every NQT goes through this exact sequence we found that even awareness to these phases is very useful for providing support to everyone involved in the process. Comments made by NQTs have been taken from the data collected over three years of documentation.

The practice proved that reflective dialogues during these phases, discussing them with the NQTs could make a difference. They moved through the same phases but, as declared by many at the end of the year, they were better prepared for the ups and downs. They told us that they felt more in control on the events and situations in their classes and by responding thoughtfully, with several alternatives in mind, they can develop professionally. It was not an immediate finding, it was revealed step by step, as the Action research expanded and the different stages of reflection became clearer. Only toward the end of the research I was able to go back to the beginning and trace the comments of the NQTs for the second time, reflect on them and understand the process that they went through with our refined help.

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<sup>100</sup> These phases were first found by Ellen Moir, Director of the Santa Cruz Consortium New Teacher Project and Director of Student Teaching at UC Santa Cruz ([www.ucsc.edu/oncampus/currents](http://www.ucsc.edu/oncampus/currents))

Figure 7- Phases in the first year of teaching



### Anticipation Phase

The anticipation phase begins during the last month of students' teaching portion of *pre-service preparation*. The closer student teachers get to complete their final assignments, the more excited and anxious they become about taking up their *first teaching positions*, and tend to *romanticize* the role of the teacher and the position. Most new teachers enter teaching with a tremendous commitment to making a difference and a somewhat idealistic view of how to accomplish their goals. *"I was happy to get the job (it is difficult to get a formal teaching position nowadays) but terrified about going from the simulated experience of student teaching to being the person 'completely in charge'"*. This feeling of excitement carries new teachers through the first few weeks of schoolteaching.

### Survival Phase

The first months of school are overwhelming for NQTs. They are learning a lot and at a very rapid pace. NQTs are instantly '*bombarded*' with a variety of problems and situations they had not anticipated. Despite increased field experiences in teacher education and preparation programs, new teachers are caught off guard by the realities of

teaching. *"I thought I'd be busy, something like student teaching at the end of the semester, but this is crazy. I feel like I'm 'constantly running'. It's hard to focus on other aspects of my life, and I have gone through other personal changes, I got married last month and we moved to a new apartment".*

During the survival phase most new teachers struggle to *'keep their heads above water'*. They become very focused and consumed with the day-to-day routine of teaching. There is little time for them to stop and reflect on their experiences and some of the NQTs spend up to fifty hours a week on schoolwork. New teachers, still uncertain of what will really work, must discover things as they happen. Every thing that they have to prepare is *'enormously time consuming'*.

*"I thought there would be more time to get everything done. I like working at two teaching jobs: 7:30-2:30, 2:30-6:00, and spent more time in the evening and on weekends to prepare".* Although tired and surprised by the amount of work, NQTs usually maintain a high level of energy and commitment during the survival phase.

### Disillusionment Phase

After six to eight weeks of non-stop work, NQTs enter the *disillusionment phase* and the intensity and length of the phase varies among new teachers. The extension time commitment, and the realization that things are probably not going as smoothly as they want, contribute to this period of disenchantment. New teachers begin questioning both their commitment and competence and many new teachers even get sick during this phase.

Compounding an already difficult situation is the fact that new teachers are usually confronted with several new events and experiences at this period of the year. The school administrator expects them to participate in, for example, back-to-school night and parent conferences, and in addition, they will experience their first formal evaluation by their superiors<sup>101</sup>. Each of these important milestones places already vulnerable individuals into very stressful situations.

Back-to-school night means addressing parents about plans for the year that may yet be unclear in the nervous teacher's mind. Some parents are uneasy when they realize that the teacher is just a NQT and sometimes pose questions or make demands that intimidate the teacher.

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<sup>101</sup> During the induction year formal supervisors evaluate the NQTs, at least twice.

Parent conference require NQTs to be highly organized, articulate, tactful, and prepared to confer with parents about each child's course of study and progress. This type of communication with parents can be awkward and difficult for a beginning teacher. New teachers are not sufficiently well prepared for dealing with parent's concerns or criticisms. Unfortunately, these criticisms occur right at the time when their self-esteem maybe waning.

In addition to the formal evaluation, it is also the first time that new teachers are evaluated by their principals and are for the most part uncertain about the process itself and anxious about their own competence and ability to perform. Developing and presenting a 'showpiece' lesson to somehow get through this 'rite of passage' <sup>102</sup> is time consuming and stressful.

During the disillusionment phase classroom management is a major source of distress. *"I thought I'd be focusing more on curriculum and less on classroom management and discipline. I'm stressed because I have some very problematic pupils who are low achievers, and I think about them every waking second, but I have no time left to teach them individually"*.

At this point, the accumulated stress placed upon the first-year teacher, coupled with months of large amount of time allotted to teaching often brings complaints from family members and friends. This is a very difficult and challenging phase for new entrees into the profession where they express self-doubt, have lower self-esteem, and question their professional commitment. In fact, getting through this phase may be the toughest challenge they face as NQTs.

### Rejuvenation

The rejuvenation phase is characterized by a slow rise in the NQTs' attitude toward teaching and generally begins toward the end of December or the beginning of January. Having a winter break 'Hanukka' <sup>103</sup> makes a tremendous difference for new teachers. It allows them to resume a more normal lifestyle, provide some rest, food, exercise, and time for family and friends. This vacation is the first opportunity that new teachers have for organizing materials and planning their lessons. It is a time for them to sort through materials that have accumulated and prepare new ones. This breath of fresh air may give

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<sup>102</sup> A term used in anthropology to emphasize stressful times when passing a formal stage.

<sup>103</sup> The Jewish feast of lights that usually coincides with Christmas

NQTs a broader perspective, renewed hope and they often seem ready to put past problems behind them.

A better understanding of the system, an acceptance of the realities of teaching, and a sense of accomplishment, all help to rejuvenate new teachers. Because of their experiences in the first part of the year, beginning teachers often gain new coping strategies and skills which help them to prevent, reduce, or manage many problems they are likely to encounter in the future.

*"I'm really excited about the story-writing centre that I organized in my class. Story writing definitely revived my subjects, helped me to better communicate with some of the pupils. It turned into a most popular activity, I was able to see it when I recorded the activities with the video-glasses by chance...".* The rejuvenation tends to last into spring with many ups and downs along the way. Toward the end of this phase, new teachers begin to raise concerns about whether they can get everything done prior to the end of the year. They also wonder how well their pupils will do on the tests, questioning once more their own effectiveness as teachers. *"I'm fearful of the tests. Can you be fired if your kids do poorly? I don't know enough about them to know what I haven't taught, and I'm not sure about their performance..."*

### Reflection

The reflection phase, which generally begins only in May, is a particularly invigorating time for the first-year teachers. Reflecting over the year, they highlight events that were successful and those that were not. They think about the variety of changes that they plan to make the following year in management, curriculum, and teaching strategies, if they have been told that they will continue in the same school with the same class.

The strategy of using video-glasses in our support model enabled us to extend the reflective phase so that it lasts almost from the beginning of the year till its end and have emphasized the importance of critical reflection.

- How does this phase, when stretched on a whole year promote self-awareness?
- Does it really change the path of NQTs professional development?
- Can their concerns and priorities be manipulated and enhanced?
- What have we learnt about NQTs Professional Development and their concerns with the help of this reflective strategy?

### Anticipation Phase

During this phase the end of the year is in sight and they have almost made it; but most important, a vision emerges as to what their second year will look like, which brings them to a new phase of anticipation. *"I think that for next year I'd like to start the puppets earlier in the year and introduce the kids to more leisure time activities, it gives me the opportunity to teach them in small groups".*

From our understanding of what the NQTs go through during these phases it becomes clear that it is crucial to assist them in their transition from being student teachers to becoming responsible professionals. Recognizing the phases new teachers go through has helped us improve the cycles of support that have been designed and implemented during the last 5 years of the induction project.

## **5.2 Organizing and Mapping the Findings**

The metaphors and explanations underpinning conventional thinking about teaching activities are oversimplified. I will try to show here more complex situations. Many events described below were always and inevitably in conflict. As clarified above the analytic approach used was '*content analysis*' and this was organised and mapped according to the following steps:

The first step was to decide upon '*labels*' for each of the 95 events - E1, E2, E2, E3, E4, and E5 ...The second step was to divide the findings into two groups according to their dates. At that point I realized that 35 events had accumulated in the first half of the year and 60 in the second. Already in the pilot period we were sorry to discover that very few, three out of 25 NQTs, were prepared to videotape during the very first months: first because many of them were placed at work only two or three months after the beginning of the school year; second because, when we asked them at that time why they were not yet ready to begin video-taping, they gave many reasons – they hadn't got to know the class yet, they hadn't received permission from the headmaster, from the parents, from the subject coordinator at school and so on. The NQTs postponed the first video-record as much as they could and only after a month or two they made the first step. This led to the small number of videotapes existing for the first two to three months of teaching – and to us losing part of the information. It was, to all accounts, important to me to follow and see whether there was any professional development during the first

months up to the end of January and, separately, what was happening during the second half – in order to examine the differences to the extent that they existed.

These ‘*events*’, which are the heart of the study, were carefully reviewed several times using *content analysis* and the most representative reflective comments and statements<sup>104</sup> were selected.

In the second and third review several more enlightening comments were selected. After long consultations with my expert colleagues, and after taking into account the context of each lesson and event; I was convinced that some of them could shed light on what was going on in the thoughts of the NQTs when they, once again, saw their classes and heard themselves in action. With the help of the illustrating examples I hope to justify the procedure and the outcomes. Only the selected sections were translated into English and will be used as examples for illustration and demonstration of the NQTs’ development of self-awareness. I follow them through the different stages of reflection and of the beginning of the NQTs’ professional development, in different dimensions. In addition, in order to present a more complete picture, I will present the complete stories of the reflection of two NQTs<sup>105</sup>.

The demonstrating examples were selected from what the NQTs considered as important to reflect upon. Sometime I picked the same event to illustrate different aspects or different emphases. Only after two years of reflection and documentation in the different three stages, was I able to see the need of mapping and organizing the findings in the following matrix. The main contribution emerged from my discussions with my colleagues, the other EPMs during the meta-reflection stage. Feeling the discrepancy between the desired goal to educate teachers capable to benefit from ‘*reflection-in-action*’ and the reality of surviving day after day, in the induction year, I was more than impressed by the power of this strategy with the help of the video-glasses, to promote the NQTs’ ‘*reflection-on-action*’ and enhance their professional self-awareness.

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<sup>104</sup> Those, which re-appeared several times among different reflections, were the representatives ones.

<sup>105</sup> See appendices 6; 7

**Diagram 3 - Stages of Reflection versus Three Dimensions of Professional Development**

**Table 1 – First Half of the Induction Year**

Stages of Reflection	Dimensions of Professional Development											
	Knowledge & Skills				Personal				Ecological			
Micro Reflection	<b>A1 25.7%</b>				<b>A2 14.3%</b>				<b>A3 5.7%</b>			
	E1	E8	E12	E14	E76	E10	E19	E21	E71	E88		
	E23	E27	E43	E54	E36							
	E66											
Macro Reflection	<b>B1 5.7%</b>				<b>B2 26.7%</b>				<b>B3 11.4%</b>			
	E11	E95			E4	E51	E62	E68	E2	E5	E56	E59
					E70	E80	E83	E91				
					E94							
Meta Reflection	<b>C1 2.9%</b>				<b>C2 5.7%</b>				<b>C3 2.9%</b>			
	E9				E22	E93			E38			

**Table 2 – Second Half of the Induction Year**

Stages of Reflection	Dimensions of Professional Development											
	Knowledge & Skills				Personal				Ecological			
Micro Reflection	<b>X1 20%</b>				<b>X2 16.7%</b>				<b>X3 8.3%</b>			
	E3	E16	E24	E28	E13	E17	E26	E60	E7	E61	E63	E72
	E34	E39	E44	E49	E69	E75	E79	E86	E74			
	E53	E57	E73	E81	E90	E92						
Macro Reflection	<b>Y1 8.3%</b>				<b>Y2 11.7%</b>				<b>Y3 15%</b>			
	E6	E18	E29	E32	E25	E35	E37	E64	E15	E20	E30	E41
	E40				E77	E84	E89		E48	E55	E58	E65
									E67			
Meta Reflection	<b>Z1 3.3%</b>				<b>Z2 8.3%</b>				<b>Z3 8.3%</b>			
	E31	E33			E42	E45	E47	E52	E46	E50	E78	E85
					E87				E82			



The main issue is not the quantity of the events but the distribution in each table and in each cell. This mapping of the events enabled me to explore and understand these complex situations, these *'patches of profession'*. When one examines the top table above the following significant things can be seen from the distribution of the events:

In the first half of the year, in the reflective monologue, A1, A2, A3, the events that were useful for reflection mainly deal with skills and knowledge (A1= 9), some with the personal dimension (A2= 5), and even less with the ecological and environmental dimension (A3= 2). In contrast with this, in the reflective dialogues, B1, B2, B3, assisted by our mediation, the picture is a little different. We deal very little with skills (B1= 2) apparently we rely on the fact that they themselves raise this issue, something they, in fact, did. We mediate to a great degree the personal dimension (B2= 9) and there may be two reasons for this:

1. This dimension is very apparent and is enhanced in the awareness of the EPMs by virtue of the recording strategy of using the video glasses – something we raise for discussion.
2. As a result of this being the second or third observation of the NQTs they themselves pay more attention to this dimension. In the third dimension of the second stage, the macro-reflection, the B3 cell, the ecological dimension, our mediation was quite moderate. (B3= 4).

If we now look at the bottom line of the first table, the important line of meta-reflection, it appears that in all three dimensions we, the EPMs, arrived at very few thinking and understanding generalizations about the two previous stages. Despite this the principle of '*less*' being '*more*' operated here since these few principles apparently had a very nice effect<sup>106</sup> on our ability to mediate the reflection during the second half of the year. We also felt this improvement intuitively, discussing it several times during the pilot study and with it also appearing as an item that arose from time to time in the discussions at the project team meetings and in my research diary. Below, in the second table however, one can see this improvement black on white. What can be seen in the second half of the year?

First of all, as we have already shown and explained above, more events were raised in the second half. Secondly one can clearly see that in the reflective monologues

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<sup>106</sup> We learnt when to wait and listen, when and how to ask an open question and so on...

X1, X2, X3, there is a good growth in all dimensions<sup>107</sup> A rise on the macro-level, the dialogues Y1, Y2, Y3, during the second half of the year also took place and here, too, there is a more balanced distribution over the three dimensions.

We will now place the focus on the third level of the second half of the year, the meta-cognition, Z1, Z2, Z3, where we find significant growth, not only numerical but also essential. How can this be seen?

First, we can see, instead of 4 inclusive reflections, in the second half of the year there are 11 – a real increase. Secondly, the distribution over the dimensions is quite balanced. We conclude from this that we probably succeeded in our attempts to avoid directing them towards our conscious aims and goals<sup>108</sup>. In addition one can see that on the level of knowledge and skills (Z1= 2) we placed less emphasis; the other two (Z2= 5, Z3= 5) are almost identical in quantity.

After the mapping and analyzing the whole picture with the help of the above matrix we will have a close-up look at the development of the different stages of reflection.

### 5.3 Stages of Reflection – Illustrations

The three stages of reflection will be illustrated, considering the aim of the study and answering the objectives of the research questions, one by one. At the micro-reflection stage, after the videotaping, which served as a basic documentation for the entire research, personal written reflection was made without any mediation. The level could be technical, practical or critical:

Example E1:

*“Do I really talk like that in class? I can hear in my voice that I am rather tense.”*

*“I didn’t even notice the group studying in the left section of the classroom... I didn’t even turn to them once during the entire lesson.”*

At the macro-reflection stage, the expert mentor, with the help of the videotaped lesson together with the written reflection, the monologue, uses mediation in a more general fashion, raising educational teaching principles.

Here, too, Van-Manen’s (1977,1991a) three levels could be expressed: technical, practical and critical.

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<sup>107</sup> Did they really improve or do I interpret these improvements more quickly and more efficiently?

<sup>108</sup> See the Aims section in the introduction.

Example E4:

NQT: *"This girl is a real 'pain in the neck'; she is always seeking approval for everything she does... how can I resolve this problem?"*

Expert mentor: *"Please go back to the second incident and stop the video when you see the close-up picture of her face... what do you see... is that the face of a trouble-maker?"*

NQT: *"Now that I'm looking closer, straight into her eyes, I see that she is a sad girl. I forgot to tell you about her background: her parents got divorced three months ago and she is begging for more attention in class...I have to talk more with her, especially before I begin the lesson. She obviously needs more attention...I can give her more..."*

Example E91:

NQT: *"The way I related to the pupil who came late to class caused me to lose my concentration...to lose the other pupils in the class...I see it now very clearly..."*

Expert mentor: *"How could you change this? Could you make a suggestion as to what to do different?"*

NQT: *"I must find another way to solve the problem of latecomers<sup>109</sup>...first, we will have a new conversation in the class about latecomers..."*

Expert mentor: *"What else can you suggest?"*

NQT: *"Perhaps I'll ask the pupils what they suggest...we will agree that every latecomer will have to complete a short assignment... Perhaps I'll prepare in advance some short assignments and when a pupil comes late, I'll point to the pile of assignments and they will understand how to continue."*

These suggestions can demonstrate how a part of the NQT's tacit knowledge becomes visible and explicit.

And another E68:

NQT: *"I would never have remembered the response made by this pupil had I not used this videotaping."*

Expert mentor: *"And now that you can see it, what do you think about the pupil's response? What else can you see now from your special viewpoint?"*

NQT: *"The video-glasses recorded all the spots and moments that I dwelt on during the lesson I can look again, and it is the third time that I watch the recorded lesson, and I understand that I should divide my attention better...I have been teaching this*

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<sup>109</sup> This is an open education class in a Kibbutz school in which some pupils frequently arrive late.

*class for only three months. I thought that he was an ordinary pupil; I now see a great deal of potential ability in the way he thinks. He gave me a clever response and I didn't even notice... ”*

In this macro-reflection stage, the researcher and her colleagues examined the language, the phenomenon that was chosen and other essential aspects required for understanding in order to start with proper mediation and promotion of NQTs' self-awareness. The notion behind this study was that a choice is not made by the NQTs randomly, and every observation about the videotaped lesson could therefore lead to a broader and more in-depth understanding.

Regarding meta-reflection, after the mediated activities and reading again the documentations from the micro-reflection stage we were able to explore a few leading principles about teaching/learning dimensions. Additional macro-reflection<sup>110</sup> was carried out on these activities. Some summing interviews held at the end of each cycle were documented in writing and were of a retrospective nature. In the open interview the NQTs without being asked, emphasized that the videotaping, the monologue, and the critical, professional discussions produced greater awareness and better understanding of the event for her and, after the dialogue, she once again observed the videotaped lesson and saw other, new things.

The generalised meta-reflection level commenced only after these activities. At this level, the EPMs and the researcher sought prominent characteristics that were revealed during the previous phases and stages.

“The structured and interpretive approaches are apparently dependent upon one another; one cannot be carried out without the other. Ricoeur's phenomenological Hermeneutics emphasizes both the objective and subjective components of the study – the interpretive action is subjective, circular and infinite. Ricoeur suggests the term “Hermeneutic rainbow.” This rainbow watches somewhat over the indefinite component of interpretation, but emphasizes that all interpretation is anchored in the text's existing structure” (Sabar and Dargish, 2001; p. 169).

This cyclic study is appropriate to the circular flow of Action research technique and therefore integrated well into our system, helping us understand other aspects every

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<sup>110</sup> Perhaps now after the whole picture is clearer I can suggest that NQTs should take part in the meta-reflection stage as well, this will be recommended for future research.

time we returned in a spiral fashion to the different reflection stages. From the first steps of our research it was clear that Hermeneutics applies well.

Research studies show that merely holding the professional reflective dialogue raises self-awareness and an understanding of hidden subjects in the teaching/learning process and teachers make professional generalisations from this development (Mattingly, 1991; Ben-Perez, 1995) Therefore, it is important to deal with reflective dialogue, study it and improve it.

I will present now more typical examples of reflective short expressions and some full dialogues. It was my aim and interest to study them over a more extensive period of time and in a more in-depth fashion. It is possible to see that the reflective videotaping learning strategy helps teachers, mentors and the researcher *'to be present again'* in the same lesson and the same pedagogic activity and accompany it with the thinking and self-awareness processes. It gives us, teacher educators, the opportunity to take a glimpse into the autonomous work and thoughts of NQTs.

The next example emphasizes a general subject in the background of the usual data; the presence of the research questions about self-awareness dominates also:

One of the NQTs who videotaped a class in which she taught science, declared that the lesson was not successful and even not worth watching<sup>111</sup>. Nevertheless, after two weeks she requested to receive guidance and feedback about her reflection. She came with her own written reflection and we sat together and watched her videotape. As usual I gave her the remote control and told her to stop the video whenever she wanted to express her thoughts before, during or after the lesson. I wanted her to lead the conversation and thus afford me the time to do my role as facilitator and mediator. Different subjects and reflection levels were brought up and the teaching year continued. At the end of the year, she came by, especially, to tell us that: *"The most important thing that had happened to me during my first year of teaching was the videotape I made of my problematic lesson...I learned a great deal about teaching from it"*. She said this without any prompting on our part.

After such additional comments we started to interview other teachers at the end of the year to provide a retrospective outlook over the entire year. The interviews were always open, and the NQTs were encouraged to raise important points or significant

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<sup>111</sup> We gave all the teachers the option of dropping out of the research at any stage up until the end of the study, mainly since we wanted to provide them with a feeling that they are in control. We hoped that they would be curious and want to continue and discover the tool's learning potential.

issues they had during the year... they raised some very interesting points and we, the EPMs, learnt a lot from these open discussions.

Another example dealing with the subject of 'group work' here again we can demonstrate the answer to another important research question '*How can we make tacit knowledge visible*':

In one of the videotapes, the teacher is seen opening the lesson "*Colours in Nature*" in an interesting fashion. She drew on the pupils' previous knowledge and wrote it on the board, handed out work sheets and assignments according to groups, and ran the lesson well despite the disturbances caused by two of the three groups. In the micro-reflection she made alone, she wrote: "*The lesson was not organised well enough, disturbance occurred, and even though I had invested a considerable amount of effort in preparing the lesson, it was somewhat disappointing to see the results...*"

In the macro-reflection she did with the mediation of an EPM another research question can be demonstrated. The dialogue was as follows:

NQT: She repeated what she wrote in the micro-reflection and said that she had already watched the videotape three times, once on her own, once with the pupils in the class, and once with a colleague from the school.

Expert mentor: "*What would you do to improve this lesson if you were to plan it again?*"

NQT: "*First of all, I would prepare the class better to do group work... I would devote more time and thought to make a better and more balanced division of the groups... I would prepare the work sheets with instructions according to the groups I had planned; in the videotape I saw that the division up to the class during the lesson took too much time and disturbances occurred as a result...*"

Expert mentor: "*Perhaps you have additional ideas that could improve the group work activity?*"

This question can illustrate the aim *improving 'self-awareness'* about teaching activities and it also demonstrates an attempt to *make 'tacit knowledge' explicit*:

NQT: "*Yes, when I saw the videotape for the third time, I came up with the idea that I had not paid enough attention to the levels of difficulty of the tasks... I gave the group of boys (who have problems in concentrating) to list the colourful qualities of various animals in a table... This was too abstract a task for them; I should have planned an easier task for them... I know from my studies how to prepare tasks according to levels of difficulty but from the videotape of the lesson I saw that I had*

*not applied this technique... I got carried away with the creative ideas and did not pay enough attention to the levels of difficulty... ”*

What did we, the EPMs, learn from this case at the *meta-reflection* stage? One of the expert mentors brought this up in one of our conversations:

*“During the teacher training, we thought that we were teaching students teachers almost everything they would need to know... It appears that in many cases, however, this is not relevant to them as students... Now it is obvious that teachers learn many things during their teaching experience... In any case, if the teacher remembers some of the things he has learned during his student days... his self-confidence will increase... his repertoire will enlarge... Perhaps we should think over parts of our college curriculum? Do we have to change things?”*

The following example is especially prominent in that it showed us again the hidden potential of this videotaping strategy. During one of the weekly workshops, it was one of the NQT turn to tell the group about an event she was interested in, bringing it up for discussion. She started:

*“I came to the class with a new idea of presenting verbal mathematical problems, a subject that is generally difficult for my pupils. I wanted to take the video glasses to this lesson but hadn’t had time to borrow them in advance. Therefore ‘I imagined that I was wearing the video-glasses and that I was videotaping the lesson’ and I will now tell you all what I actually saw and virtually ‘taped’ ... ”*

Here we can see the display of all the research questions: enhancing the potential of the strategy of reflecting with the recorded lesson; even imagining the video-glasses possibility can improve the NQTs reflection and perhaps also improve their performance.

The last objective was to look if there is a shift in the concerns of NQTs and what we understood about it from the examples. I will explain this important understanding with the exploration of diagram 3. From the first glance at the tables in that diagram and at the differences that had taken place between the first and second halves of the year, which made us happily think that there was, in fact, a change in the concerns of NQTs because of the new strategy; there was small interest in what was happening to the pupils of the NQTs already during the first half, see box A2, B2 of the personal dimension<sup>112</sup>

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<sup>112</sup> True, a large part of this was due to our mediation.

and in the second half there is a considerable rise, see box X2, Y2 of the same dimension.

We thought then that perhaps the concerns of teachers really do change, but when I closely studied again the examples and observed some segments of videotaped lessons I had no other option than to admit that the NQTs are more interested in their pupils than we or Fuller thought possible in their first year of teaching. At first I thought this was simple true and was happy for a few months, but recently, in the process of writing the last drafts of the thesis after re-reading the examples, it seems to me that it is more correct to explain this growing interest in a more complex manner and not in the simplistic way that seemed right when I first saw the findings.

It looks as if the motivation for the interest in their pupils is based upon the '*survival needs*' of the NQTs themselves. The mechanism is simply more sophisticated than we originally thought; the NQTs now understand better that the key to their successful survival in the classroom and school depend on the relationship they develop with the pupils and the level of influence they have upon the learning of those pupils. I have to say that coming to these insights has been an uncomfortable experience for me. I hoped to cause the NQTs to have more interest in what happens to their pupils' learning and education with the help of the special strategy. Nevertheless, other insights about the nature and use of reflection, brought me to appreciate the potential of the strategy, the genesis of the proximal zone of development of NQTs made this research journey worthwhile and challenging. In the next three chapters I will illustrate these new insights. I believe that every teacher comes to know in her/his own way. To represent teaching activities as uniform is contrary to most real life experience, which is characterised by diversity and individuality. The essential aspect is to keep us all free to think for ourselves. Complex situations can be grounds for engaged critique and creative teaching.



## 6. Discussion – the Aim - Promoting Self-awareness

The overarching aim was to explore how reflection with the help of video-glasses can promote and improve self-awareness of NQTs. I started this journey of enquiry with practical experience, theoretical perspectives and several interesting questions about NQTs and their world.

Recognizing the fuzziness of the concept of reflection and knowing the tricky issues and complexities in teacher education; I acknowledge the possible contradiction between the NQTs' autonomous development, when they choose what to reflect upon, and the mentor's role to draw out wider and more critical reflections. The schematic model we used was the teacher critical pedagogy model (Gover, 1997), which perceives the essence of teacher education as training of "*intellectuals working towards a change of reality*," that is, training cultural workers who will be interested in and capable of fulfilling a dialogical and transformational pedagogy. This important subject, although it is in the background of this study, determines its quality to a great extent.

Van-Manen's levels of reflection and the descriptive dialogical and critical types and stages of reflection identified above, brings us to an understanding of teachers' complex role through enacting, and to teachers' planning process and repertoire along with studies into their thought and reflections. Now, trying to draw the threads together, we followed various levels of reflection, Van-Mannen's (1977) three levels or Valli's (1992) more detailed hierarchy of six levels. But, the present study emphasizes the different stages to achieve the goal of becoming a reflective beginner. It highlights the potential of the first year of teaching, being in the ZO-PED of professional development. It draws the attention to the role of an expert mediator and it underlines the function of the reflective dialogue in enhancing the professional self-awareness of NQTs.

Based on previous studies, and the data so far collected and analysed, there are several streams of thinking to consider. The desired reflection-in-action (Schon, 1991) appears to be the most complex and demanding kind of reflection, calling for multiple type and levels of reflection to be applied simultaneously during an unfolding professional situation. In order to achieve such an approach to reflection one needs considerable experience linked with constant professional self-awareness. Reflection on action, as described in most of the examples above, is substantially different because it involves reflecting on action some time after a particular event. The advanced strategy, collecting full evidence with the help of the video-glasses, having a stimulated recall and

describing the reflective thought process going through their heads while an event was occurring, can promote both the desired reflection-in-action that we hope every good teacher will practice and the more basic form of reflection-on-action that every professional should apply.

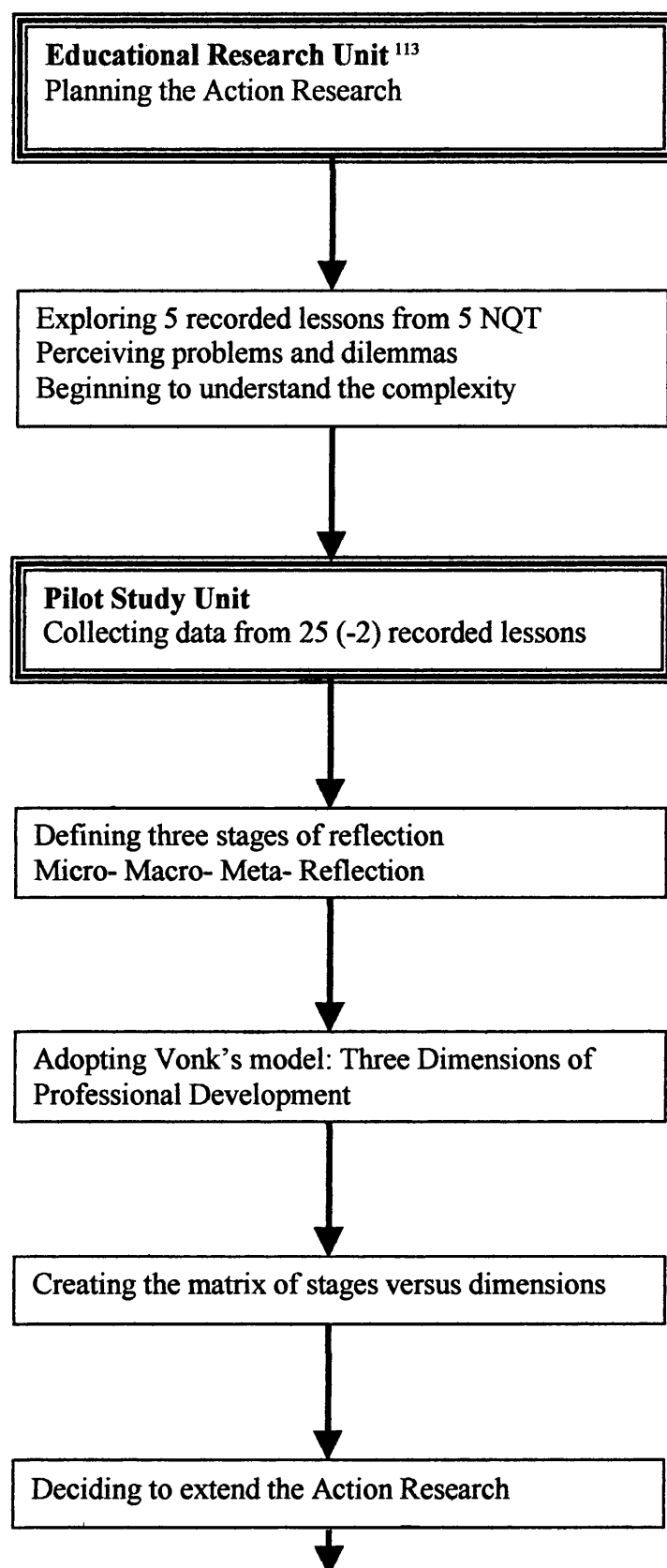
According to the critical pedagogy model, a teacher is not a representative of the 'objective,' 'neutral,' 'academic' profession, as most teacher programs in Israel and the Western world claim. Rather, he is an intellectual who perceives his work as being a mission stemming from his moral ethos and inducing social-moral transformation (Giroux, 1989; Gur-Zeev, 1995). This educational concept has principles of dialogue and multi-culturism that are converting the learning process into an almost complete process of equality between the teacher and the pupils.

In our qualitative and hermeneutic research the main thing is the interpretation and search for meaning in a world of complex phenomena that demands identification, explanation and interpretation. During the last few decades there has been impressive progress in the understanding of human learning processes and once again, learning is not perceived as a passive process of absorbing messages. Teaching, as well, is no longer perceived as a process of simply transferring messages. From observations and research done on teaching it has become clear that, in order to achieve goals, one does not only need skills and talent but also professional self-awareness.

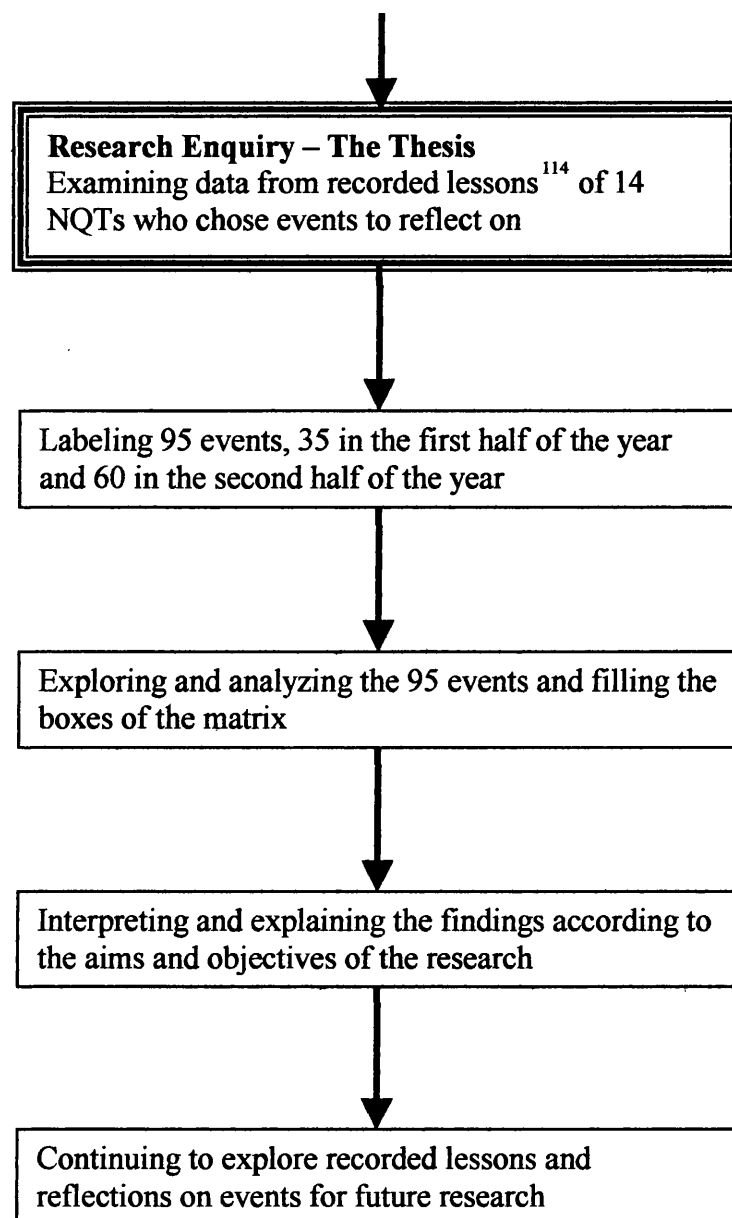
Acting in the first layer, the induction program for more than five years, caused me to document and collect data even before this research began. From the first unit, beginning to act in the second layer, the research inquiry, different and more organized kinds of data were collected. The flowchart below describes the process of data collecting, the sources of these pieces of data and the phase of the research when the special kind of data accumulated, was analyzed or remained crude.

Whilst promoting professional self-awareness for NQTs, I found my self more self-aware of my role as coordinator of the induction program and as the one responsible to document, collect, organize and analyze data that evolved in the process of the expanded Action research.

**Diagram 4 - The process of data collection, defining the stages of reflection, adopting Vonk's model, creating the matrix and analysing it**



<sup>113</sup> For the exact timing of the different units, please see diagram 2 - Phases in the Research p.61



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<sup>114</sup> As a result of the pilot study, the unit of reference in the thesis was each “event” that the NQTs have chosen to reflect on. The context of those 95 events was 32-recorded lessons.

The examples of critical reflection were often brief and rather superficial; yet many events and dialogic and descriptive reflections were complex, multi-dimensional, and according to Vonk (1995) and my findings, demonstrate several kinds of professional development. We found distinct forms of reflection with a development sequence, starting with the reflective monologue with the relatively simplistic or partial technical type, continuing with the reflective dialogue, conducting reflection-on-action and summing the process with the meta-reflection, the EPMS' reflection on the whole procedure and gain scholarship.

The goals and contents of teaching and teachers' development, as professionals, must be seen as professions that arise out of a rich repertoire; and have a multi-levelled context of teaching in which teachers have to make decisions. In the thesis we studied flaws that exist in professional development – including that of expert mentors and NQTs; we made progress in the development of self-awareness about the complexity of the educational situation and the identification, naming and definition of both problems and the components of reflective thinking on different levels stages and in different forms.

This type of processing involves reflection that transfers the acquired knowledge through the prism of the personal worldview of the learner and through the contextual prism of the locale regarding Vonk's personalizing and localizing knowledge.

We learnt much and clarified the developing structures by examining Vygotsky's ideas about the zone of proximal development, the ZO-PED. The induction year is a critical time zone for NQTs professional development. They survive; they enlarge their repertoire and become more confident and more competent. They need the help of Expert mentors and the mediation to a higher stage of reflection, the highest stage possible NQTs are capable to do, at this threshold stage. This insight has a most profound influence on our understanding of PD of NQTs and it emerged repeatedly in the dialogues during the different stages of the reflection cycle.

I can expand the theoretical perspective beginning with expanding and explaining the following diagram about the genesis of performance capacity: progressing through the ZO-PED and beyond which I took from R. Tharp and R. Galimore<sup>115</sup> focusing on the first stages, when capacity begins and the ZO-PED is relevant.

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<sup>115</sup> "Theories of teaching as assisted performance" – see please full reference in section 9.

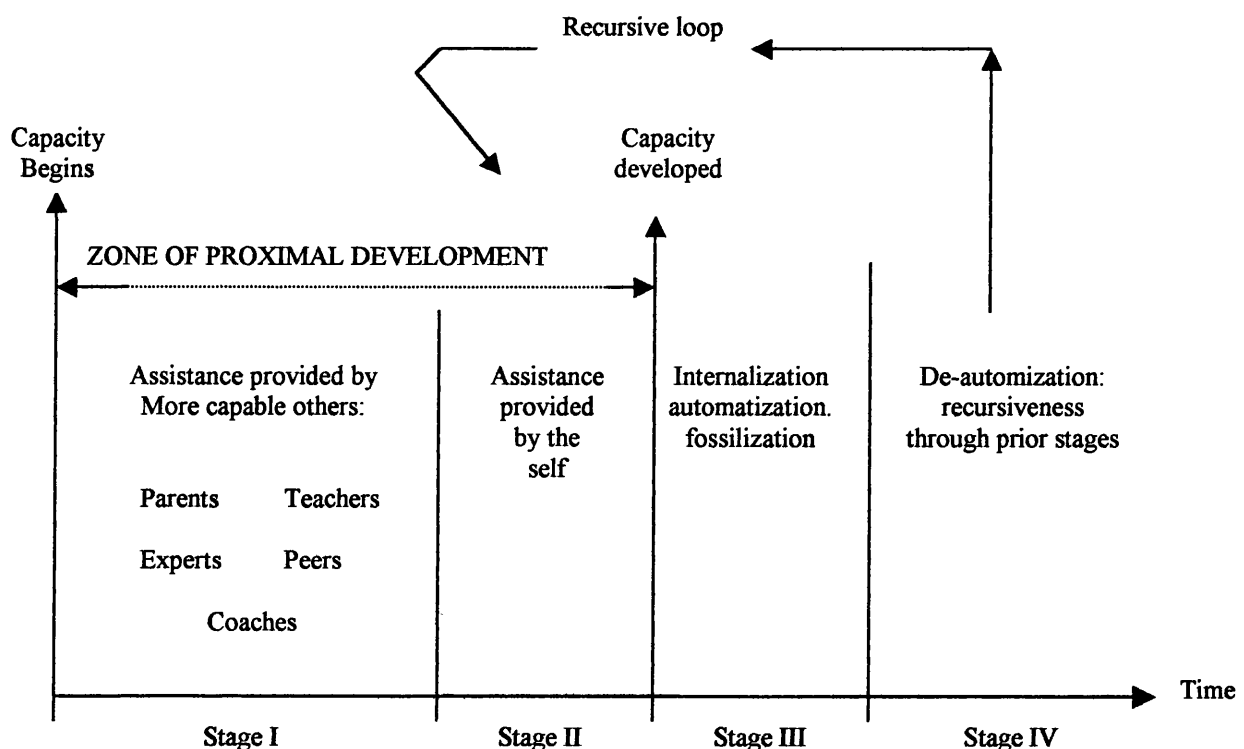
In my thesis, only the first stage of Thrapp and Galimore was explored. The capacity begins with the first monologue of each NQT. We gave assistance of experts during the mediated dialogue in the second stage of reflection. The examples from the findings show how the repertoire of the NQTs was enriched, their professional perspective became wider, and they became more competent (Eraut, 1994).

Going through the phases of the induction year, we have seen that towards the end of the year, the self provided assistance starts. Their self-awareness was promoted and it developed their capacity and it shows in their summing interviews or writings. Stage three from the following diagram is beyond the scope of my thesis. The internalisation automatization and fossilisation happen after the NQTs finish the induction year. It will be recommended for further research.

Stage four will happen in the years to come, when the teachers, with more experience, will change role or move and develop professionally; then a recursive loop will take place and another kind of de-automatization will happen.

**Figure 8 - Genesis of performance capacity: progression through the ZO-PED and beyond**

Source: R.Tharp and R. Gallimore "Theories of teaching as assisted performance" in *Learning to Think* p.50



In our context, conducting reflective dialogues with adults, dealing with andragogy, different NQTs started from different levels of reflection; nevertheless in general, during stage I, we could see a steadily decline plane of expert responsibility. The transition from EPMs regulation to NQTs regulation and self-awareness were the most important points of illumination in the study.

The transit begins while performance is still being carried out in the recorded lesson and the NQTs watch it for the second or third time with the mediation of the EPMs. They focus on the inter-psychological plane of functioning, because at that point the reflective dialogue starts with an '*enrichment of language*' using '*strategic direction*' and '*empowering behaviour*' (Tharp & Gallimore, 1991; Feurstein, 1998).

The components that make up reflection and the fostering of the reflective teacher have been an important part of planning and construction of teacher educating programs from the end of the 20<sup>th</sup> century onwards. This is the most promising way to ensure maximal adaptation to the many changes that are becoming everyday practice in teacher education. This is also the only way to handle such complex situations that teachers have to deal with in their professional lives.

The more I studied the data and explored the reflections analysed, the more I understood how virtually impossible this mission is for the NQTs - and, wonder of wonders, they were generally doing quite well; they were handling things, advancing and developing. One always has to be an optimist and if we<sup>116</sup> have been part of these better, more complex solutions, then we have been successful.

Structural reflection is an acquired skill. Experienced teachers learn lessons for the future from their experience and are not satisfied with their experience alone but also learn from the experience of their colleagues (Zilberstein and Ben-Perez, 1998). It seems that readiness for reflection is, in one way or another, not only tied to the prevalent conditions, as has been shown here, but also to the personalities of the teachers and, as a result of this, the subject is even more complicated. Should we adopt the strategy that leads NQTs to '*be*' teachers instead of only dealing with survival and how to '*do*' teaching? Perhaps there are some research initiations in this direction and the present study can justify what we had accomplished here; but only additional long-term studies will be able to indicate clearer developments.

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<sup>116</sup> The teacher educators prepared them during the years of internship education.

Teaching is a practical, purposeful activity and the core knowledge of teachers is the practical knowledge they have acquired during their pre-service education years and their practice. The first year of work for graduates of teacher education presents a rare opportunity for the colleges to receive real, up-to-date feedback on the whole process of their education. The teachers are autonomous, the teaching is most complex and they have to adapt themselves flexibly. There is the '*extra added value*' here of reflective thinking about the structure of their education and direct, unmediated connection between the college and the practitioners of teaching in the field.

The strategy that we used, with the help of the video-glasses provided us with a true integration between the contradictions '*inside/outside*'<sup>117</sup> which demands data analysis of the two aspects through the use of different ways of thinking and several perspectives. Only in this way can we reach a stage where practical, situational, specific, intuitive, uninterpreted knowledge can be turned into general, formal and interpreted knowledge. The contribution of this research, or so I hope, could be very significant for the public debate over the attempt to change the face of teaching and teacher education programs in the 21<sup>st</sup> century.

In a scientific, technological world characterized by rapid economic-social-cultural change the emphasis is placed upon the fostering of the abilities of teachers and student-teachers to be constant learners throughout their professional lives, life long education. The development of the learner/teacher as a '*self regulated learner*' is not only a desirable educational ideal but also a reality necessary for survival. In a technologically sophisticated environment the only teachers and students who will be able to function efficiently will be those who know how to select what specific information is important to them for the production of the knowledge banks and wisdom they aspire to from the avalanche of information that engulfs them. In order to do this they must have control over their own learning processes, be able to criticize and navigate them, be self-aware of a considerable degree and develop professionally. Contained in this type of learning are meta-cognitive elements and it is characterized as reflective teaching/learning. We described and illustrated with the help of examples how such a process can be identified and understood.

The examples expose additional components of this type of educating: dialogue-cal teaching, imparting a humanistic and liberating ethos, imparting criticism opposite

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<sup>117</sup> The NQTs and the EPM '*being in the class*' or '*sitting outside*' and watching.



submissive foundations of society, fulfilling the democratic and critical experience in school, etc. Self-awareness of teachers can be derived from these dialogues. The uniqueness of educating in the spirit of critical pedagogy represents the humanistic basis of this study. The key factors used here were '*self-awareness*', '*professional development*', '*empowerment*', '*and the voice of the other* ', '*learning by joint study and relearning by the teacher*'.

All these assumptions about critical pedagogy (Giroux, 1989; Gover, 1997) have important implications regarding the philosophy and practice of the desired education of teachers and also, of course, regarding the induction stage and the research questions on which we are focussing. Based on this approach, focus must be placed primarily on the development of self-awareness and social-moral thinking and on the ability to relate this awareness to building a study atmosphere that conveys values of '*being together*' while fostering values of freedom, equality, social justice and concern for every subject in an era of marketisation and capitalistic egoism.

Imparting teaching and didactic skills alone cannot educate teachers towards critical pedagogy. Rather it demands teacher creativity, imagination and thinking to direct his work towards the '*possible*' and not just towards the '*actual*'<sup>118</sup>. Teachers of this type are agents of change of a social order that is more equal in the cultural and economical sense. Training of this type is heading in the direction of "*from theory to practice*" or "*from idealism to practice*." For this, a teacher must undergo personality changes, beginning with the notion of self-awareness.

Critical pedagogy conforms to '*critical thinking*' and the fostering of reflectivity (Harpaz, 1996). According to this perception, thinking and rationality cannot be related to without having a solid foundation. A communicative rationality is preferred as the Archimedes starting point for educational dialogue. Teachers championing critical pedagogy must expose the normative assumptions of the critical parameters according to which they think and teach their pupils. They must also enable their pupils to challenge these assumptions and not hide under the umbrella of only '*imparting tools and skills*'.

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<sup>118</sup> See appendix 6 for example.

## 7. Conclusion – The Objectives

The above concrete evidence and examples support and illustrate the claims made at the beginning and during the previous phases of the research. The first purpose of this three-stages reflection study was to promote NQT's professional self-awareness whilst analysing teaching situations. The second was to cause NQTs to '*internalise*' the reflection processes, discuss them and make them more explicit. The third was to convince them to apply their previous and new knowledge to the complex circumstances of every lesson. In the discussion above I explored the whole analysis, exposed evidence, answered some of the questions, and pinpoint issues that are still not explicit. The innovative tool that helped us, proved to be most of the time non-intrusive and very useful<sup>119</sup>. Therefore we, the EPMs, were able to build the strategy in a flexible style, watching the NQTs promoting their self-awareness, where some of the strengths and weaknesses evolving from development needs have been identified, and set the pace and direction to conceptualization of the process and future research.

In the light of the above discussion we shall now return to both the original aims and objectives we had at the beginning of the research study and check again the operative goals. What have we, in fact, learned here?

We can see from the examples presented above and from the analysis of the tables, the matrix in diagram 3 that emerged out of the research that the NQTs' self-awareness was enhanced. They tried the strategy of reflecting on the recorded lesson using the video-glasses and the EPMs helped them by mediating a more critical reflection during the reflective dialogue. In the process we discovered that many examples of concrete evidence that covert knowledge, through the use of the reflective monologue and the subsequent reflective dialogue<sup>120</sup>, can be turned into more overt knowledge that can be discussed and about which we develop awareness in regard to the strengths and weaknesses of each case and event<sup>121</sup>.

We argue that experts, in order to highlight and challenge the professional development of novice teachers, must carefully mediate cases and facilitate discussions. On the other hand, the NQTs' capacity to handle uncertainty and to bring about change,

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<sup>119</sup> Some exemptions: when the NQT was wearing her/his own glasses, it was a problem to wear two pairs but even so almost all of them succeeded and managed...in another case, the wires were disconnected in the middle of the lesson, or the batteries went off earlier than planned...

<sup>120</sup> This purpose was not always achieved but the general direction was towards it.

given appropriately supportive circumstances, can be equal to or better than more experienced teachers.

Innovative approaches to teaching and learning like the illustrated above can be considered as part of professional development. The focus on the induction year of NQTs, the zone of their proximal development has an interesting potential. This conclusion leads us to hope that future international study focused on technology and communication can advance the teaching profession to new horizons.

## 7.1 Self-awareness of Professional Development

Looking again to every aim, objective and goal, responding to data by questioning again the assumptions and the practice, we can consider it newly. There are several transformations related to the NQTs self-awareness, many of them declared openly in the summing interviews. During the stages of reflection the NQTs and the EPMs came to new understandings as demonstrated above. After each cycle of reflection we tested that knowledge. By reframing once again the goals we can understand it better from a wider perspective, after this research enquiry.

The primary chain of goals of the research were:

- To explore how reflection with the help of the video-glasses strategy can promote and improve self-awareness of NQTs. In the findings, partly illustrated in the examples I can find evidence of advancing the professional awareness of the NQTs.
- When we defined the three dimensions of professional development, following Vonk (1993, 1995) we were able to organize the findings and thus understand the components of professional development.
- To convert a greater amount of their existing tacit knowledge<sup>122</sup> into a more explicit and open knowledge was another objective that we witnessed during the different stages of reflection, in the monologues, dialogues interviews and free conversations.
- To educate them through their practice and to hope that '*reflection on action*' will more easily become '*reflection in action*' and this will enlarge their repertoire, their alternatives to act, empowering their professional development.

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<sup>121</sup> Examples in chapter 5 and 6 – Findings and Discussion

<sup>122</sup> Regarding the iceberg phenomenon, described in chapter 2.

- Lastly and most important I wanted to explore the effect of mediation and support during this first year of teaching, passing from the '*threshold stage*' to the '*stage of growing into the profession*' when NQTs are in a zone of proximal development. We can find several enlightening examples to the differences between the NQTs' capacity in their monologues and their capacity when they are provided with assistance by more capable others, namely the EPs, but we were not able to see evidence when the NQTs can manage with assistance provided by themselves when their capacity is developed. Neither is it possible to see examples of their internalization and automatization<sup>123</sup> of this capacity, it is beyond the scope of this study. It will be recommended for future research.

The desired change in practice and the quality of educational research reflects concepts such as '*power*' and '*personal voice*'. There is a strong tendency towards enabling the person being mentored to express his/her '*voice*' and thus to help him improve and change his practices and beliefs (Cochran-Smith & Lyle, 1999; Hargreaves, 1996).

Collaboration was the main process in the first practical layer, the induction project, and in the second layer, the study carried during the last three years. As demonstrated in the previous chapters we learnt a lot from dilemmas, the shared work and the dialogues. The evidence shows that not only the NQTs had gone beyond their immediate circle but also the expert mentors questioned again their role, their ways to mediate reflection to NQTs and their capabilities in such complex situations.

I brought some detailed examples of how can NQTs begin their career and how can teacher educators help them to construct and utilize to best advantage. This research on what and how teachers learn from their classroom experience at this particular stage of their career was an emergent rather than established field of study. There is and perhaps will always be a tension between teachers need to learn more and become better at what they do, while being expected, without wasting of time, to perform to the highest standards possible, demonstrating a rich repertoire of teaching activities.

## 7.2 Making Tacit Knowledge Explicit

A second and clear objective that emerged from the expanded Action research planned even before I started the pilot study was to know more about the NQTs tacit

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<sup>123</sup> See figure 8 – Genesis of performance capacity.

knowledge, to make it more visible and explicit and by this to empower their self-awareness and cause them to share it with us. Remembering well the '*iceberg phenomenon*' whereby explicit knowledge is only a small part of the teacher's overall knowledge, similar to the iceberg where only a small part is visible above the water surface and the majority is invisible, buried beneath it, I tried to listen carefully to what they had to say about every event that they chose to reflect on. What they say when they criticize their teaching activities and decisions or plan an improvement for the next lesson.

The NQTs discussion went on, and in many examples I, the EPM was witness to their becoming self-aware of their tacit knowledge and even declaring that openly. Sometimes their hidden concerns became visible and explicit.

The study examines ways of making tacit knowledge of teachers explicit, with the help of the reflective dialogues. Sometimes it was planned and intended but most of the time it was spontaneously and therefore not possible to control. Being a first research of the kind, made it interesting and challenging but in recommended future research perhaps a better-planned strategy can give more results; for example, to facilitate more responsibility to the NQTs as participants in the Action research, to ask them to be more partners in the process and enable them to reach the third stage of the meta-reflection.

The research enquiry described above gave us the feeling that we succeeded to clarify, at least several parts in what we named in the beginning '*patches of profession*'. We can conclude now other parts of our new understanding.

### **7.3 Dimensions of Professional Development**

There are and always have been difficulties in defining effective teaching and improving teaching quality. I tried to clarify some components in the dimensions of professional development<sup>124</sup> of NQTs and find patterns in this complex phenomenon.

It is clear that the professional development of established teachers continues to undergo significant change, stimulated by new initiatives like the one investigated above, and we, teacher educators, intend both to support and direct the process. These changes and interactions represent valuable opportunities to understand better this

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<sup>124</sup> Following Vonk and his three dimensions of professional development.

complicated process in order to continue and influence NQTs' professional development in this special year and after.

We can most effectively and realistically plan the way ahead for teacher initial training and for their induction; but it is difficult and complex because the contexts of individual teachers' work, the range of responsibility they hold, their own educational backgrounds, and personal abilities are very varied. The reflective strategy, with the help of the video-glasses can perhaps justify what is essential in working out what it is that teachers are to be inducted to and how it can be achieved. In such a strategy we claim to identify essential competencies, presume procedures for its use in which the NQTs will carry a record of their experience and thus enhance their capabilities for the years to come.

The concept of teacher education practices is difficult, one-size-fits-all type of recommendation will not serve right in this case. Learning about real things that are done in real situations is very important; learning, first hand, from the reflection of teachers about their practice is the most important understanding. If self-awareness can become intrinsic to education practice it has a better potential than being extrinsic, a way that every teacher looks at his activities and improves his practice. We cannot pass this knowledge to others that do not embrace this self-awareness approach, we can only recommend the process and even the methodology and structure but every teacher has to find his own way to reach self-awareness and develop professionally.

#### **7.4 Teachers Concerns and Professional Development**

We will now focus on the last goal declared in the introduction, and explained in the end of the findings, the subject of the *teachers' concerns* (following Fuller, 1975) and my intention to describe the possible shift in '*teacher concerns*'. By analysing the findings in tables 1 and 2 in diagram 3, I tried to examine if there really is something new in the video-glasses assisted strategy, recording the personal interactions and mediating the reflection that follows it.

Was there some chance to enhance and shift the interests of teachers as we teacher educators see it? Fuller and many others educators and researchers after her claimed that new teachers are mainly interested in themselves and their survival and only later, after two or three years, begin to pay attention to the subject matter they are teaching; much

later in their careers, about the fifth or sixth year of teaching, they begin to see what is happening to their pupils.

We<sup>125</sup>, hoped, from the beginning of this study, that the angle of recording that put the pupils in the focus of attention and which left the NQTs only to make his/her voice heard would have a good potential to change the order of priorities of the NQTs and cause them to become more interested in their pupils at an earlier stage of their professional development. Such behaviour could be considered as advancement in the professional development during the EPMs discussions in the third stage, the meta-reflection stage.

As explained before, we were almost sure that we have found evidence, namely enough examples, that can demonstrate change in the priorities and concerns of NQTs. We were convinced that in many cases, the NQTs, in their monologues and their dialogues they concentrated on their pupils and the interactions with them. But after exploring again the different examples that the NQTs chose to reflect upon, we became more careful, we decided that perhaps it was too early to celebrate, perhaps it was partly a wishful thinking...the NQTs are really more interested in their pupils but their reflection on their pupils is driven by their own survival needs and not from pure caring, anxiety or deep understanding.

The NQTs read the map in a sophisticated way, they know that if they can succeed and maintain good relationship with their pupils, they will be able to survive and even prosper in the induction year and after. They feel that the path to their professional development goes through real concern about their pupils; thus, it is the same important concern but it has a different source.

Fuller and other researchers after her explained that teachers, after reaching confidence in their professional capacities, have time and patience to see the needs of their pupils; and we indicate now, after this study that perhaps we can cause NQTs to consider their pupils early in their career but the motivation will remain survival. The first year of teaching is too complex and demanding and therefore the NQTs cannot ignore their surviving conditions, no matter how empowered they are.

On the whole I was very impressed by the achievements of the NQTs that we worked with. Many issues proved to relate to my conceptual framework. It was difficult to distinguish between my factual and my conceptual conclusions. I tried hard to move

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<sup>125</sup> Meaning all the EPMs in the project, as almost every experienced educator/mentor have half conscious, deeply rooted assumptions and expectations.

the NQTs' thinking and my own thinking from the descriptive to the conceptual level. This is to say that they do take more interest in their pupils and do practice reflection in discussions about how to improve this understanding, but the interest does not come from the relaxation that comes from being an experienced teacher who is psychologically free enough to see how well his/her pupils are learning. Their interest comes from the more basic needs of survival. This fact is, perhaps, a little disappointing for me as a researcher but it also emphasizes the great complexity of the mission of teaching/learning that both the first year teachers and we, their mentors who have to help them advance and empower them, need to deal with.

## **7.5 Implications and impacts of the research**

Some potential implications and impacts of this research study have been already realised over the past few years; others are only recommended for the future. Some will probably affect us in the near future, others only after additional years of continued practical research.

The findings of this study show that even though NQTs, who engage in reflection using the video glasses, appear to focus on the learning needs of students, their rationale still relates to survival in the classroom. We may apply this knowledge to improve the support provided during the induction year by understanding the central motives of NQTs' interactions. We may also improve our curriculum and teacher education standards, especially during the practice periods, since this new knowledge could empower us, the teacher educators, and enable us to foster student teachers more effectively. We could modify our expectations and develop a more sophisticated strategy to help them in their professional development.

To sum up, we could say that despite our success in raising the awareness of NQTs within the research framework, and despite the phenomenon of over-flooding of pedagogical information and its conversion from tacit to explicit knowledge, we are unable to give NQTs a genuine "head-start."

While learning about what we cannot do, we also learned a great deal about those "patches of profession" representing the complex world of NQTs. Engaging in reflection in all of these "events" helped us understand and provided us with specific concrete examples of learning-teaching skills on different dimensions.

The main achievements may be summarised in two power points for teachers:



1. Coping in a better and more sophisticated way during a problematic year.
2. The beginning of better, more promising growth and professional development.

In proceeding from the individual level of the teacher in the classroom to the college level, and the more comprehensive national level, I would now like to emphasise two levels of implications and impacts of this research study:

#### **A. College Level**

1. This study, similar to other research studies that are still only few in number, is aimed at promoting the college, which is currently undergoing a period of transition from a professional academic institution having a specific mission that up until recently awarded only a teaching certificate and a bachelor's degree, to an institution that awards a master's degree in education and fosters practical research.
2. Exposing this study to the weekly workshop instructors and other support groups in the college will result in an improvement due to the new insight gained about the world of NQTs since the instructors are in touch with one another and represent the learning team. They could support and empower teachers better, and their expectations of NQTs would be more realistic.
3. Exposing the tacit knowledge of NQTs and making it explicit and discussed more in a research framework will enable the college, in addition to fostering NQTs, to also receive first-hand feedback about the training period, aspects requiring improvement and power points.
4. As a result of this study, a center for the research and follow-up of college graduates during a period of 1-5 years will be established. This study, dealing with the first year, will make a contribution if continued research studies are pursued.
5. This study is one of the first to be presented in a thesis format dealing with the Oranim School of Education and its graduates. An attempt is made here to engage in reflection on a college level regarding both recent and future changes, as well as concerning the suitability of the teacher training to the needs of the 21<sup>st</sup> century.

#### **B. National Level - in the context of teachers and the educational system in Israel**

1. Over the past five years, while participating in the National Forum of Induction Coordinators directed by policy-makers and decision-makers from the Ministry of Education, I gained an in-depth understanding of all aspects of genuine teaching situations. This study could help improve the level of discussion held during this

important forum, which is attended by individuals representing all of Israel's colleges and universities.

2. The study could also enhance courses training mentors in the field. The induction programme has been implemented successfully in Israel, and we are now at a stage whereby we are lacking mentors in schools and kindergartens having good support and instructional skills. This study could add theoretical and practical aspects and raise the level of courses currently being developed in colleges and universities.
3. The induction programme started the slow process of bringing the Ministry of Education and those heading it, primarily the Teacher Training Division and the Induction Division, closer to the field where teachers are working and implementing the Ministry's policies. This action research and additional studies from other colleges that were also presented to the Division heads could accelerate this process.
4. The Ministry of Education has recently promoted the formal national system of summing assessment forms during the induction period. There is a clear intention to adapt the assessment methods to the actual teaching-taking place in the field. This study could contribute and recommend elements that would improve these assessment forms.
5. As a result of the induction programme, stronger ties are developing between supervisors from the Ministry and local districts and between the teacher training colleges. This study, which was also distributed to local district supervisors, could bring these bodies even closer by exposing the world of NQTs to the Ministry's formal supervisors, thus improving their integration into schools.

As mentioned above, some of these effects have been already felt while preparing this study on the practical level mentioned in the first chapters of my thesis, while promoting the subject of induction in the Israeli context and in working with NQTs during their first year. Other chapters of this study will contribute both in the near and distant future.

## 8. Self Reflection and Recommendation for Future Research

I would like to revisit the ideas explored in this study. While revisiting them I'll identify clusters of themes and reflect on them. One of the reasons to investigate in this study was, first of all, to promote and support the improvement of teacher education practice during the induction year through self-study after reaching self-awareness. This relates to the practical layer of the research – the induction programme. In the second layer, the research enquiry, it is an Action research about the professional development of NQTs and also about facilitating dialogues, creativity, and scholarship among us, expert pedagogical mentors (EPMs). In addition I would like to hold myself accountable for my beliefs that the best way to help NQTs develop is by empowering them to reflect on their work. This approach to professional development and our understanding of the research process strengthens my conceptual framework and enables me to expand parts of the theories that I began to explore in the beginning of this study – the expansion of Vygotsky's theory, especially his notion about the ZO-PED for adult teachers, and the special kind of mediating dialogue developed by Feurstein.

Now, at the end of my exploration of the induction year, the zone of proximal development of NQTs; writing about the reflective monologue, the mediated dialogue and emphasizing critical pedagogy; I know that I gained new and wider perspectives, reframed issues of interest, concluded some critical remarks while being aware of the limits and complexity of the intervention possible. Some issues represented in this thesis can serve as stepping-stones against which prospective researchers can develop new questions for future studies.

When I embarked on this study, my intention was to help NQTs during a problematic year; now, looking at the beginning from the end of the thesis I am reassured that I was also exploring my own capabilities. How is my own work and self-awareness situated in teacher education discourse? I'll show now an example of my '*conversation*' with this new scholarship. It demonstrates the construction of my inquiry and knowledge at many levels.

The induction project and this research enquiry brought me back in a time tunnel to my first years of teaching, in the primary school and seven years later, to my first year at the junior-high school. In the research diary that I wrote in the last three years I found some personal reflections:

*“When I recall the very packed agenda I had during my first year of teaching many years ago... everything was full with routine activities; I was mainly kept busy with precise planning and had no time to think about what I was doing – not before the lesson and not after it... I was always thinking about the next lesson. How will I activate the pupils? How will I get them to learn?”*

*I recognize it now but actually I thought about this much later in my career... during the first year I thought a lot about surviving, about the subject matter... about planning and organizing the learning environment. I was an expert Science and Nature teacher and I had to demonstrate a high level of control over teaching skills and show a deep knowledge of the subject matter – much more than I felt I really had... I was ashamed to recognize that parts of the subject matter I learnt together with my pupils... some years after I looked at the same situation as a privilege, I enjoyed the new journey every year...*

*Now, after some years, I feel the excitement again... coordinating the induction year for the NQTs and mediating their reflections made me very grateful to them... I am learning so much from them, every day, every month, every year... I see the classes packed with pupils anew and the NQTs in stress and I set out on a new journey, but with much better equipment, with more confidence and with the ability to help them by giving them a helpful look, by saying something small but what I considered to be significant... this is the core of professionalism... to be able to distinguish better between what is and what is not significant... how long did it take me to get to this? How long will it take them? Am I offering them, with this innovative strategy, some sort of 'encapsulated' form of experience? Something concentrated and significant that will bridge years of experience? This, being on the inside/outside situation - feeling what they feel, while being outside and supporting them, is a strange feeling... it is another contradiction that I learnt to live with... ”*

Reflecting now on the study, beginning with the first plan, then reviewing the literature and making the first decisions about the methodology and method; continuing with the educational management and the pilot study, I can see how the questions emerged and the last questions were generated and separated in aims and objectives in the main research. The idea of organizing the data in that nine-cell matrix emerged from the findings of the pilot study and turned to be an important tool for mapping and understanding the data of the main research. That beginning dictated the end.

My conclusions link to the work of Vonk but the innovative way of collecting data was very realistic and full of details and it bewildered my colleagues and me. We had too much data, too complex situations to explore. In the beginning, especially during the pilot I was trying to validate qualitative research in terms of positivistic thought, as I was taught to think while conducting my M.A thesis some years ago. I was skeptical if I could explain and defend my recent work from new paradigms and critical needs in teacher education today...by assisting NQTs to go beyond survival and open up to issues of complexity and diversity I found myself enriched. Promoting reflection and professional self-awareness via Action research and knowledge creation is a challenging work and has the potential of making a contribution to knowledge.

I know, from reviewing literature and meeting at conferences that I am not alone in this feeling of knowledge creation, I belong to a community of practice that continues to study their practice and illustrate *'life theories'*.

I can see now several recommended directions to future research. The first and simple way to continue this research can be by asking the NQTs to reflect seven or eight times on the same recorded lesson and to pick a new issue every time or a new dimension every time. Another substantial improvement can occur if in the following studies we will extend the meta-reflection stage to the NQTs, to make them real partners by sharing the overall picture with them.<sup>126</sup>Will it be possible?

A very important direction will involve repeated enquiry in the second, third and fourth year of teaching; many things can be discovered in a long-term study. There are not many educational researches that continue for five years.

Another direction can be to focus the video-glasses, to give them to one of the best pupils in the class and record the lesson from his viewpoint; or to give them to a pupil with special needs and then we can see the lesson through his little eyes...

This kind of study emphasizes pedagogical issues and processes. It is complex and contains a lot of phases, stages and dimensions but it shows how teachers in their first year of teaching can begin to promote their professional self-awareness and their practice and how they can engage with that foundation of professional knowledge. It broadens the conception of teaching quality.

The induction year can be better planned, supported and understood if there is a clear sense of the continuing professional development. In addition it should also

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<sup>126</sup> We started a preliminary process during the last summing interviews, this year.

influence the curriculum of the pre-service program. The contradictions and tension described above are familiar to all teacher educators but it remains an important area for further research.

Another aim of my ongoing practice as a researcher is to generate my own theories of practice; this study is only a beginning. I intend to continue and use these frameworks to help me make sense of my context, to expose and challenge other education and teaching issues, make more tacit knowledge explicit and powerful. Working with others, NQTs and EPMs to promote new ways of thinking and being, in an effort to improve the educational and professional development of future teachers, will make this a better, more beautiful life for their pupils and us all.

**Links to websites of interest:**

<http://www.actionresearch.net/>

<http://jeanmcniff.com>

<http://www.emtech.net/actionresearch.htm>

<http://www.nipissingu.ca/oar/>

<http://www.ed.asu.edu/edrev/guidelines.html> - 5k

## 9. References

- Airasian, P. and Gullickson, A. (1997). *Teacher self-evaluation tool kit*, Crown Press.
- Altrichter, H., Posch, P. & Somekh, B. (1993) *Teachers Interactive their work*, London, Routledge.
- Argyris & Schön, D. (1975) *Theory in Practice: Increasing Professional Effectiveness* Jossey-Bass Publishers
- Bain J. D. et al (1999) Using Journal Writing to Enhance Student Teachers' Reflectivity During Field Experience Placements. *Teachers and Teaching: theory and practice*, Vol. 5, No. 1.
- Ballantyne, (1995). Mentoring Beginning Teachers: A Quantitative Analysis of Process and Outcomes, *Educational Review*, Vol. 47, No. 3.
- Ballantyne, R. & Packer, J. (1995) The role of students Journals in facilitating reflection at doctoral level, *Studies in Continuing Education*, 17(1&2), pp. 29-45
- Belbin, M. (1993). *Team Roles at Work*, Oxford: Butterworth-Heinemann
- Bell, D. and Ritchie, R. (1999), *Toward Effective Subject Leadership in the Primary School Buckingham*: Open University Press.
- Ben-Perez, M. (1995) *Learning from experience: Memory and the teachers' account of teaching*, Albany: N.Y. Sunny Press.
- Ben-Perez, M. (1998). "Reflection in Training Teachers: Myth or Reality." In: M. Zilberstein and S. Ziv (eds.), *Reflection in teaching: The main stream in the teacher's development*. Mofet Institute, Tel Aviv (Heb)
- Berliner, D. (1986). In pursuit of the expert pedagogue. *Educational Researcher*, 15 (7), 5-13.
- Bleicher, J. (1980). *Contemporary hermeneutics: Hermeneutics as a method, philosophy and critique*, London: Routledge and Kegan Paul.
- Bolam, R. (1994). The Impact of Research on Policy and Practice in Continuing Professional Development, *British Journal of In-service Education*, Vol. 20, No. 1.
- Bolam, R. and van Wieringen, F. (1999). *Research on Educational Management* Munster: Waxmann.
- Burden, D. (1990). Teacher Development. In: W. R. Houston, M. Haberman and J. Sikula (Eds.), *Handbook of research on teacher education* (pp. 311-329). New York: MacMillan Publishing Company.

- Calderhead, J. (ED) (1988), *Teacher's professional learning*. London: Falmer Press.
- Calderhead, J. (1992). The Role of Reflection in Learning to Teach. In: L. Valli (ed.), *Reflective Teacher Education: Cases and Critiques*. Albany: N.Y. SUNY Press.
- Calderhead, J. and Robson, M. (1991). Images of teaching: Student teachers' early conceptions of classroom practice, *Teacher and Teacher Education*, Vol. 7, pp. 1-8.
- Calderhead, J. (1993). The Contribution of Research on Teachers' Thinking to the Professional Development of Teachers. In: C. Day, J. Calderhead and P. Denicolo (eds.), *Research on teacher thinking: Understanding professional development*. London: Falmer Press.
- Calderhead, J. & Gates P. (Eds) (1993) *Conceptualizing reflection in teacher development* (pp. 1-10) London: Falmer Press.
- Calderhead, J. (1996). Teachers: Beliefs and Knowledge. In: D. C. Berliner and R. C. Calfee (eds.), *Handbook of Educational Psychology*. New York: MacMillan Reference.
- Clandinin D. J. & Connelly F. M. (1995) *Teachers' professional knowledge landscapes*. New York: Teachers College Press.
- Cochran-Smith, M. & Lyle, S. (1999). Relationship of knowledge and practice: teachers learning in communities. In *Review in Research in Education* (ED). A. Iran-Nejad. & P.D. Peterson, American Educational Research Association. Washington D.C.
- Deal, T. & Peterson, K. (1994) *The Leadership Paradox*. San Francisco: Jossey-Bass
- Dewey, J. (1910) *How We Think*. Boston, MA, D.C. Heath and Co.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. Boston D.C. Heath.
- Eisner, E. W.(1985) *Creative Education in American Schools Today*. Educational Horizons species' 63 p. 10-15.
- Eisner, E. W. (1997). *The enlightened eye: Qualitative inquiry and the Anthem event of educational practice*. N.Y.: Meuill.
- Eisner, E. W. (2001). Concerns and Aspiration for Qualitative Research in the New Millenium – Paper at the Conference of Qualitative Research, University of Tel Aviv.
- Elbaz F. (1988) Critical reflection on teaching: Insights from Freire. *Journal of Education for Teaching*, 14(2), 171- 181.



- Elbaz F. (1992). Hope, attentiveness and caring for difference: The moral voice in teaching. *Teacher and Teaching Education*, 8 (5/6), 421-432.
- Eraut, M.(1994). *Developing Professional Knowledge and Competence*. Falmer Press.
- Fang, Z. (1996). A review of research on teacher beliefs and practices, *Educational Research*, Vol. 38 (1), pp. 47-65.
- Farrell, (2001) Postmodernism and Educational Marketing, *Educational Management and Administration*, Vol. 29, No. 2, pp. 169 –179.
- Fenstermacher, G. (1988). The place of Science and epistemology and Schon's concept of reflective practice. In P.P Grimmete and G.L Erickson (EDS). *Reflection in Teacher Education*. New york: Teacher College Press (pp.39-40).
- Feinman-Nemser, S. (2000). *From Preparation to Practice: Designing a Continuum to Strengthen and Sustain Teaching*, Paper commissioned by the Strengthening and Sustaining Teaching project (SST) coordinated by Bank Street College.
- Feuerstein, R. (1998). "The Coherence of the Theory of Modifiability." In: A. Kozulin (ed.), *The ontogeny of cognitive modifiability – applied aspects of mediated learning experience and instrumental enrichment*. Jerusalem, Israel. (Heb)
- Fuller, F. & Bown O. (1975). Becoming a teacher. In Ryan K.
- Gallagher, S. (1992) *Hermeneutics and Education*, Albany: N.Y. SUNY Press.
- Giroux, H. and Maclaren, P. (1989). Introduction. In: H. Giroux and P. Maclaren (eds.), *Critical pedagogy, the state and cultural struggle* (pp. 11-25). Albany: N.Y. SUNY Press.
- Gover, N. (1997) Educating teachers in the light of critical pedagogy, *Reviews on Education*, Vol. 2, No. 2, pp. 109-127.
- Grossman, P. (1992). Why models matter: An alternate view on professional growth in teaching *Review of Educational Research*, Vol. 62, No. 2, pp. 171-178.
- Guba, E. G. and Lincoln, Y. S. (1994). "Competing Paradigms in Qualitative Research." In: N. K. Denzin and Y. S. Lincoln (eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.
- Gur-Zeev, A. (1997). The basic problem of critical education today, *Reviews on Education*, Vol. 2, No. 2, pp. 9-25.
- Hacohen, R. (1997). *Action research in education: Education, research principles and characteristics*, Professional development program for educators, Institute for Action Research in Education.
- Hacohen, R. and Zemran I. (1999). *Action research – teachers researching their work*, Klil Press, Mofet Institute, Tel Aviv.

- Harvey, T. and Drolet, B. (1994). *Building Teams, Building People*, Lancaster, PA: Technomic.
- Hargreaves, A. (1992). "Cultures of Teaching: A Focus for Change." In: A. Hargreaves and M. Fullan (eds.), *Understanding teacher development* (pp. 216-241). New York: Teacher College Press.
- Hargreaves, A. (1994). *Changing teachers changing times: Teachers' work and culture in the postmodern age*, Cassell, London.
- Hargreaves, D. H. (1996). *Teaching as Research-Based Profession: Possibilities and Prospects*, Teacher Training Agency Annual Lecture, London: TTA.
- Harpaz, Y. (1996). *Education towards critical thinking*, Magness Press, Hebrew University, Jerusalem.
- Harvey, L. and Drolet, M. (1994). *Building teams, building people*, Lancaster, PA: Technomic
- Hatton & Smith (1995) Reflection in Teacher Education: Towards Definition and Implementation. *Teaching & Teacher Education*, Vol. 11, pp. 33-49
- Hoyle, E. and John, P. (1995). *Professional Knowledge and Professional Practice*, London: Cassell.
- Jirasinghe, D. and Lyons, G. (1996). *The Competent Head: A Job Analysis of Heads' Tasks and Personality Factors*, London: Falmer Press.
- Kemmis, S. (1993) Action Research and Social Movement: A Challenge for Policy Research. *Education Policy Analysis Archives*, 1.1. (Electronic journal without page numbers).
- Kincheloe, J. & Steinberg, S. (1993) A tentative description of post-formal thinking: The critical confrontation with cognitive theory. *Harvard Educational Review*. Fall 93, Vol. 63 Issue 3, p.296.
- Knowles, M. and all (1984). *Andragogy in Action*. Houston, Texas: Gulf Publishing Company .
- Knowles, M (1998). *The adult learning*, Fifth Edition, Houston, Texas: Gulf Publishing Company.
- Korthagen, F. A. J. (1993). Two modes of Reflection. *Teaching and Teacher Education*. V9 n3 p. 317-26.
- Korthagen, F. & Russel, T (1999). *Building Teacher Education on What We Know about Teacher Development*. Netherlands; Queen University of Kingston (Canada).

- Korthagen, F. A. J. and Wubbels, T. (1995). Characteristics of reflective practitioners: Towards an operationalization of the concept of reflection, *Teachers and Teaching: Theory and Practice*, Vol. 1, No. 1.
- Kozulin, A. (1999). *Vygotsky's psychology*, Harvard University Press, Cambridge, Massachusetts.
- LaBoskey, V. (1993) Case investigations: Pre-service teachers as an aid to reflection. In J. Shulman & L. Nelson (Eds.) *Case methods in teacher education*. (pp.130-156). San Francisco: Far West Laboratories.
- Levin, B. B. (1995) Using the key method in teacher education: The role of discussion and experience in teacher thinking about cases. *Teaching and Teacher Education*, 11, 63- 79.
- Levi-Strauss, C. (1986). *Structural anthropology*, New York: Basic Books.
- Levy, J. (1986). *Hermeneutics*, Poalim Press, Israel.(Heb).
- Lincoln, Y. & Guba, E.G. (1985). *Naturalistic Inquiry*, Sage, Newbury park.
- Mattingly, C. (1991). "Narrative Reflection on Practical Actions: Two Learning Experiments in Reflective Story Telling." In: D. A. Schon (ed.), *The reflective turn: Case studies in and on educational practice* (pp. 235-257). New York: Teacher College Press.
- McEwen, E. (1997). *Leading your Team to Excellence: How to Make Quality Decisions*, Thousand Oaks, Ca: Crown Press.
- McNiff, J. (1988) *Action Research: Principles and Practice*, First Edition (1988/1992), London, Routledge. <http://www.jeanmcniff.com/>
- McNiff, J., Lomax, P. and Whitehead , J. (1996) *You and your Action research project*. London: Routledge.
- Merseth, K. (1991) *The case for cases*. Washington, DC: American Association for Higher Education.
- Moir, E. - UC Santa Cruz ([www.ucsc.edu/oncampus/currents](http://www.ucsc.edu/oncampus/currents))
- Peleg, R. (1992). Mentoring Teachers in their First Year of Teaching, *Dapim*, 14, pp. 88-97. (Heb)
- Pope, B. (1993). "Anticipating Teacher Thinking," In: C. Day, J. Calderhead and P. Denicolo (Eds.), *Research on teacher thinking: Understanding professional development*. London: Falmer Press.
- Rachimi, Z. (1995). The Process of the Change in the System of Teacher Training in Colleges in Israel, *Dapim*, Vol. 21, pp. 50-67. (Heb)

- Richardson, V. (1995) *Teacher education: Research and policy*. Keynote address presented at the annual meeting of the National Reading Conference. New Orleans, LA
- Ricoeur, P. (1981) What is a text? Explanation and Understanding. In: J. B. Thompson (Ed.), *Hermeneutics and the human science* (pp. 145-164). New York: Cambridge University Press.
- Robinson, V. (1993) *Problem Based Methodology: research for the improvement of practice*. Pergamon Press.
- Russell, D. (1996) *Rethinking genre: An activity theory analysis*. Paper presented at the Vygotsky Centennial of the national conference of teachers of English Research Assembly, Chicago USA
- Sabar Ben-Yehoshua, N. (2001). *Genres and tradition in qualitative research*, Dvir Publishing House, Israel. (Heb)
- Sabar Ben-Yehoshua, N. and Dargish, R. (2001). Telling an Enquiry. In: N. Sabar Ben-Yehoshua (Ed.), *Genres and tradition in qualitative research*, Dvir Publishing House, Israel. (Heb)
- Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schon, D. A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Schon, D. A. (1991). *The reflective turn: Case studies in and on educational practice*. New York: Teacher College Press.
- Schwandt, T. A. (2000). Three Epistemological Stances for Qualitative Inquiry: Interpretivism, Hermeneutics, and Social Constructionism. In: N. K. Denzin and Y. S. Lincoln (Eds.) *Handbook of qualitative research* (2<sup>nd</sup> Ed.) (pp. 189-213). Thousand Oaks: Sage.
- Shulman, J. (1992) Introduction. In J. Shulman (Ed.) *Case methods in teacher education*. (pp. 1-30) NY: Teachers College Press.
- Shulman, L. S. (1992) Toward a pedagogy of cases. In J. Shulman (Ed.) *Case methods in teacher education*. (pp. xii-xvii) NY: Teachers College Press.
- Smagorinsky, P. (1995) The social construction of data: Methodological problems of investigating learning in the zone of proximal development. *Review of Educational Research*, 65, 191- 212.
- Solas, J. (1992). Investigating and student thinking about the process of teaching and learning using autobiography and the repertory grid, *Review of Educational Research*, Vol. 62, pp. 205-225.

- Stacey, R. (1992) *Managing the Unknowable*, San Francisco: Jossey-Bass.
- Stenhouse, (1975) *An Introduction to Curriculum Research and Development*. Heineman Educational Books.
- Strauss, S. & Berliner, D. C. (1996) *Teachers' mental models of children's minds and learning*. (Final report submitted to the United States – Israel Bi-national science Foundation). Jerusalem
- Tharp R. & Gallimore R. (1991) Theories of teaching as assisted performance. In *Learning to Think* Light P. Sheldon P. and Woodhead M. Routledge Press (pp. 42-59).
- Tomlinson, H. (1997). *Managing Continuing Professional Development in Schools*, London: Paul Chapman.
- Valli, L. R. (1992) *Reflective teacher education: Cases and critiques*. Albany: State University of New York Press.
- Valli, L. R. (1993) reflective teacher education programmes: an analysis of case studies, in: J. Calderhead & P. Gates (Eds.) *Conceptualising Reflection in Teacher Development* London The Falmer Press.
- Van Manen, M. (1977). Linking ways of thinking with ways of being practical, *Curriculum Inquiry*, 6, 205-228.
- Van-Manen, M. (1990). *Researching Lived Experience*. New York: State University of New York Press.
- Van-Manen, M. (1991a). Reflectivity and pedagogical moment: The normativity of pedagogical thinking and acting, *Journal of Curriculum Studies*, Vol. 23, No. 6, pp. 507-536.
- Van-Manen, M. (1991b). *The tact of teaching: The meaning of pedagogical thoughtfulness*. Albany, NY: SUNY.
- Vonk, J.H.C (1991), Becoming a teacher, brace your-self. In: Ho Wah Kam & R.J.L Wong, *Improving the Quality of the teaching profession: An international perspective*. Singapore: Institute of Education. pp. 63-82.
- Vonk, J. H. C. (1993). *Mentoring beginning teachers: Development of a knowledge base for mentors*, Paper presented at the Annual Meeting of the American Educational Research Association, Atlanta 1993, ERIC ED 361 306.
- Vonk, J.H.C. (1994), *Mentoring beginning teachers: Development of a knowledge base for mentors*. Paper present at the Annual Meeting of the American Educational Research Association. Atlanta 1993. ERIC ED 361 306.
- Vonk, J.H.C. (1995), A knowledge base of mentors: Results of a Dutch experience. In: McBride, R. (Ed), *Teacher education policy: some arguments based on recent research*. London: The Falmer Press.

- Vygotsky, L. S. (1978). Interaction between Development and Learning. In: L. M. Cole et al. (Eds.), *Mind in society: The development of higher psychological processes*, Cambridge (pp. 79-91), MA: Harvard University Press.
- Vygotsky, L. S. (1986). *Thought and language*, (A. Kozulin, Trans. & Ed.) Cambridge, MA: Harvard University Press. (Original work published in 1934).
- Wallace, M. and Hoyle, E. (2001). *Managerialism in Education: A Solution in Search of a Problem?* Paper presented at the Annual Meeting of the American Educational Research Association, Seattle.
- Wallace, M. and Huckman, L. (1999). *Senior Management Teams in Primary Schools: the Quest for Synergy*, London: Routledge.
- Wallace, M and McMahon, A. (1994). *Planning for Change in Turbulent Times: The Case of Multiracial Primary Schools*, London: Cassell.
- Wallace, M (2001) Sharing leadership of schools through teamwork: a justifiable risk? *Educational Management and Administration* 29, 2: 153-167.
- Whitehead, J. (1989). Creating a living educational theory from questions of the kind, 'How do I improve my practice?' *Cambridge Journal of Education*, Vol. 19, No. 1, 1989.
- Whitehead, J. (1999). *How do I improve my practice? Creating a Discipline of Education through Educational Enquiry*. Ph.D. University of Bath. Living Theory Section of <http://actionresearch.net>
- Whitehead, J. (2001). Reviewing Educational Research From the Ground of Educational Practice: Constructing One's Own Living Educational Theories. <http://www.bath.ac.uk/~edsajw/>
- Wertsch, J. V. (1991). *Voices of the mind: a socio-cultural approach to mediated action*. Cambridge, MA: Harvard University Press.
- Winter, R. (1998) Finding a Voice - Thinking with others: a conceptions of Action research, *Educational Action Research* 6, 1 pp. 53-68.
- Yogev, A. (1999). Public Policy in Israel, In Nachmias, D. and Menachem, G. (Eds.) *Israel Democracy Institutes*. (Heb).
- Zeichner, K. M. (1992). Conceptions of reflective teaching in contemporary US teacher education programme reforms, in: L. Valli (Ed.) *Reflective Teacher Education*. Albany, NY, State University of NEW York Press.
- Zeichner, K. M. (1994). "Research on Teacher Thinking and Different Views of Reflective Practice in Teaching and Teacher Education." In: J. Carlgren, G.

- Handal and S. Vaage (eds.), *Teachers' minds and actions: Research on teachers' thinking and practice* (pp. 9-27). London: Falmer Press.
- Zeichner, K.M. & Gore, J.M. (1990), Teacher Socialization. In: Houston, W.R. (Ed) *Handbook of research on teacher education*. New York: MacMilillan. (pp. 329-349).
- Zilberstein, M. and Ben-Perez, M. (1998). *Reflection in teaching – The main stream in the teacher's development*, Mofet Institute, Tel Aviv. (Heb)
- Zozofski, R. (1998). Teachers' Knowledge: Exposure and Conceptualization – Advanced Teacher Training Course. In: M. Zilberstein et al. (eds.), *Reflection in teaching – The main stream in the teacher's development*, Mofet Institute, Tel Aviv.(Heb)
- Zilberstein, M. and Sabar, B. Y. N. (1995). School Curriculum Planning in Autonomous Schools: The Situation Today and Trends for the Future, In D. Chen (ed.) *Education Towards the 21<sup>st</sup> Century* (pp. 119-140), Tel Aviv, Ramot Press, Tel Aviv University (Heb).
- Ziv S. (1996). The Deepening of Academization in the System of Teaching Workers, *Dapim*, 23, pp. 91-111(Heb).
- Ziv, S. (1997). Circular in Getting Ready for Implementing Induction for College Administrators (Heb).



## Appendix 1 – The Video Glasses – An Educational Application

# VIDEO GLASSES

*High Definition Color Image • Clear Sound*



**EYEVUE**  
THE ULTIMATE IN SURVEILLANCE

EyeView™ is a super miniature cost-effective video camera:

- ❖ Providing a fully undercover portable system
- ❖ Including a full line of interchangeable camera heads
- ❖ Operating on four AA standard Alkaline, NiCad or NiMH batteries
- ❖ Achieving high stability of image with complete freedom for hand movements

Wide range of applications

**SECURITY**



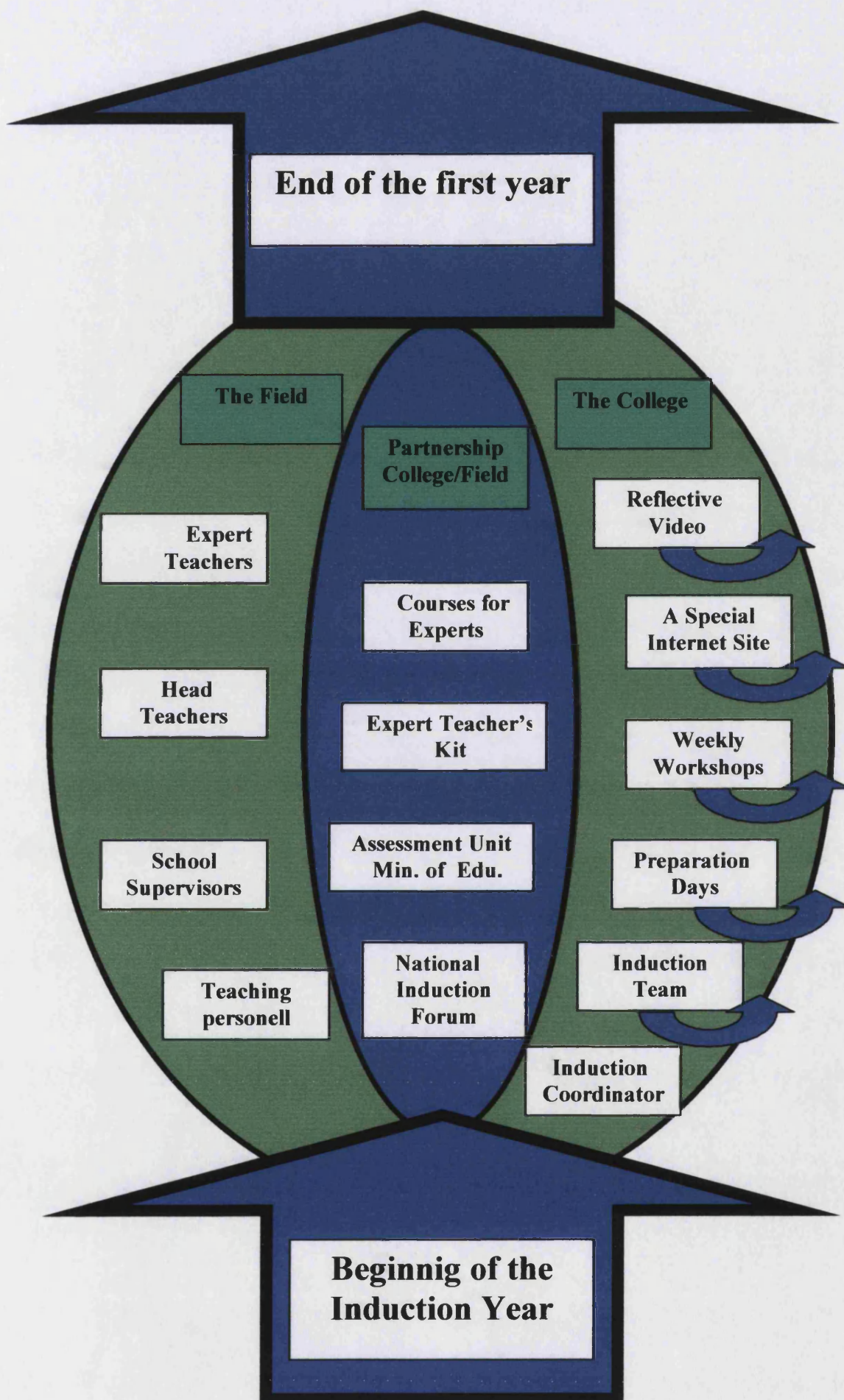
**MEDICAL**



**SPORT**





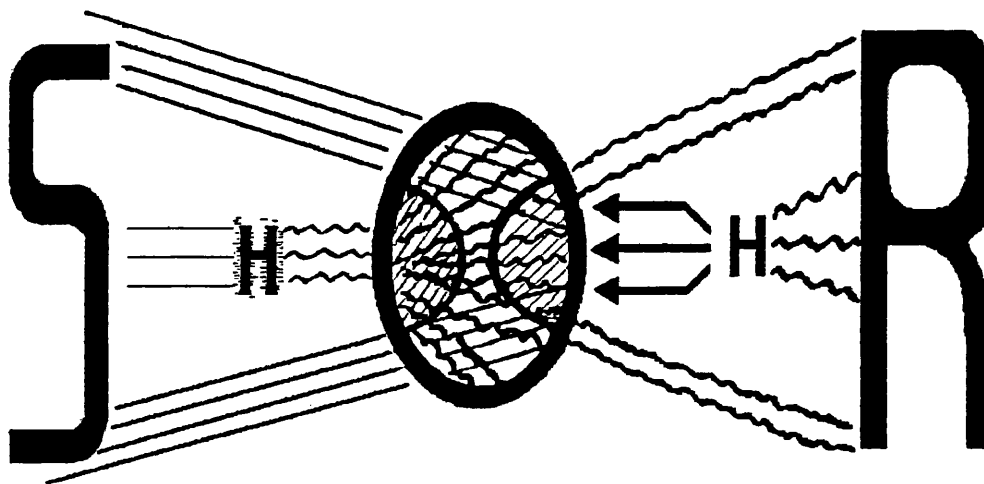


## Appendix 3 – Feurstein's Schema of Mediation

### Mediated Learning Experience Model

NOTE: S = stimulus, H = human mediator, O = organism, R = response

SOURCE: Didactic materials of the International Center for the Enhancement of the Learning Potential and the Hadassah-WIZO-Canada Research Institute



#### Appendix 4: Two Aspects in team management

<b>Team as Managers</b>	<b>Team as Leaders</b>
Deal with maintaining and <b>improving</b> the existing situation or “doing things the right way.”	Deal with <b>changing the existing reality</b> or “doing the right things.”
Focus on present and make efforts in doing “more of the same.”	Focus on future and make efforts in creating another future, a better one.
Rely on past vision and work to preserve it.	Build a <b>new vision</b> and work to internalise it among people.
Respond to existing reality, coping with it by using <b>problem-solving</b> procedures.	Create a <b>new reality</b> , building it together with many other individuals.
Deal with internal organisation, establishing existing processes and <b>creating stability</b> .	Deal with <b>undermining stability</b> by both confronting existing satisfaction and striving to escape from the existing perception.
Deal with defending, preserving and conforming to rules, procedures and regulations. They <b>strengthen certainty</b> .	Break old rules and regulations, and create or relate to new truths. They forge ahead <b>bravely into the unknown</b> .
Act during periods of stability, certainty and relevancy of <b>existing paradigms</b> .	Rise to <b>periods of crises</b> when old paradigms do not work any more.
Hate risks and uncertainty. Act carefully and try to please everyone and avoid conflicts and instability.	Go to places where others dare not to go alone. <b>Loves risks and are creative</b> .
Go with the flow, are intelligent but <b>realistic and pragmatic</b> .	Make trouble professionally, <b>challenge</b> us intellectually, visualise, are intuitive. Leaders are the source of inspiration for many.
Do not build new things, are not innovative, and are convinced that with a little more effort, greater cooperation, <b>order and discipline</b> , the team can overcome every crisis.	Sense crises before others, <b>preach change</b> , and are <b>innovative</b> . Are convinced of their fairness and see in their vision a new, positive <b>values-oriented</b> challenge.

Those characteristics fit for persons in the team and for the team as a whole. Things are really not always so dynamic as they appear. An educational team manager who champions changes today must actually navigate between the roles of leader and manager each and every day; and discuss dilemmas of leadership and values even when these qualities are not really evident.

## One Typical Event – E55<sup>1</sup>

### A. Background

Dori teaches 18 hours a week, mostly Grades 2 to 6, as well as a remedial Grade 8. Dori is a NQT who teaches in a development town in a practical vocational school in which pupils from low and medium socio-economic backgrounds, as well as new immigrants – mainly Ethiopians, study. She teaches within the framework of a Special Education programme funded by the K.R.B. Foundation for Enrichment in School Classrooms. The class she teaches is a Grade 8 Special Education class with pupils having special needs and the topic is the “Magic Lesson “ (how to perform all types of magic tricks their context and explanations). The reflective dialog discussed here took place about one month after Dori started to teach but since the project only started in November, almost one full trimester has already been completed.

### B. Monolog

This is the stage at which Dori, after recording the lesson, watches it and writes a reflective monolog on her own, without any preparation or guidance.

*“In the recorded lesson one sees immediately that we are talking about a Special Education class. Many of the pupils do not cooperate immediately. They express interest (since the programme is well-structured and interesting, also for me) but are not as alert or active as I had hoped they would be. I see in the recorded lesson that even the first organisation, sitting at their desks, takes too long. Afterwards, when I introduce the new subject, I explain too much. I seem to be talking all the time during this lesson. I don’t let the pupils talk... I must try to talk less. But how will I be able to teach all the material dictated by the programme? A great deal of teaching aids is available in this programme but it takes so much time to distribute them during the lesson. I don’t know how to do this quickly and effectively. Perhaps I could think about this together with my supervisor”<sup>2</sup>*

*“In the meantime, I would like to write here about several things that came to mind while watching the recorded lesson for the first time. Certain strategies are*

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<sup>1</sup> I chose this case study in order to describe it in full, or almost in full, since the subjects raised here are also very common to other case studies.

<sup>2</sup> Here Dori continues to write a one-page monolog about the filmed lesson as was required of her. Most of the subjects are at the level of simple description about the lesson and includes considerable technical, but very little practical, reflection.

*required in order to succeed in performing magic tricks: 'Let's start right away with the trick,' 'Applause from the audience, please,' and 'What a strain on my brain'...*

*"In the 'Magic Lesson,' one pupil presents a magic trick learnt in the previous lesson in order to strengthen her skills in performing the trick. I present a new magic trick and the pupils talk about its structure and explanation".*

The phenomenon of discipline and tardiness: the everyday teacher (the one that teaches them all the week) is present in the class but works according to her own needs, corrects notebooks and prepares material for the rest of the day. The class enjoys the atmosphere and works well. I am not needed to resolve disciplinary problems.

Avi, the Ethiopian pupil presents a magic trick and already the pupils are giving their feedback: *'The trick didn't work.'* I stopped them and wanted to first emphasise how Avi did succeed; we must encourage him (round of applause is desired).

Another problem exists; there are 2-3 pupils whom I could not convince to perform a trick.... They had an image problem; the *'Young Magicians'* kit they received for the project identified them as being in the Special Education class. The kit is more suitable for younger children, aged 3-4 years younger than the pupils in this class. But within their class framework, the pupils are proud of the magic tricks they perform.

At the beginning of every lesson, about 10 minutes, I present some general knowledge. I do this in less time in this class since it is hard for the pupils to concentrate. I see in the recorded lesson that I am trying to give feedback in the first person *'You did this or that...'* but this does not always work for me.

### **C. Reflective Dialogue**

Dori brings the recorded lesson and the monolog in which she has jotted down some of her thoughts that came to mind while she watched, and we started to watch together. I asked her to take the remote control and stop whenever she wanted to say something or ask a question. While we started to watch, Dori gave a little background about the school (written above), and after two minutes she stopped the film and said:

NQT: *"The main problem I have in this class, as well as in two other classes I teach, is that I can't remember the names of the pupils. Every week I walk into classes that combined, have about 90 pupils, and even though more than one month has passed, I still can't remember their names. I remember Avi's name since he is*

*Ethiopian and is very shy. As for the rest, it is not very nice that I don't remember their names... they expect that I should."*

EPM: *"I also think it is important to remember their names. Perhaps you know of some ways or tricks that can help you remember the pupils' names?"*

NQT: *"In the teacher training college, we learned a little bit about familiarity games and remembering names but I don't recall exactly. I think this was during the first year when we still did not know one another. I have a problem – the pupils know each other well but I don't know them. I have an idea; maybe I could take advantage of the recorded lesson in order to sharpen my memory about their names? What do you suggest?"*

EPM: *"A teacher can remember names in several ways. Let's see what you choose; perhaps you could pay attention to some outstanding features of the pupils. You said that Avi was Ethiopian and was shy and therefore you remembered him already in the first lesson. Who else stands out?"*

NQT: *"There is an especially tall pupil called Nora as well as two identical twins called Sharon and Dan. It is easy to discern between them since Sharon has long hair and Dan has very short hair. There is also a very loud, possibly hyperactive, pupil called Miriam, a new immigrant from the former Soviet Union called Ina, and a girl who looks older than her classmates called Natalie. I see that I can indeed remember some of their names."*

EPM: *"Good, you can see for yourself; you only have to believe in yourself and want to do it. What about having them place name-cards on their desks? Tell them it is important for YOU to remember their names and ask them to help you already at the beginning... what do you think? Let's continue to think about other ideas together."*

We continued to watch the filmed lesson and saw that after the first explanations at the beginning of the lesson, Dori invites one of the pupils to present to the entire class the magic trick they had learned last week.

EPM: *"Do they present magic tricks in every lesson? How about asking everyone presenting a trick to state his name and something about the field of enrichment that interests him regarding magic or any other area? This would help you get to know them better and perhaps also remember their names."*

NQT: *"You'll see later on in the record how the pupils and I arrange the class before the magic trick presentation. The trick is like a real show; the audience applauds after the trick are performed. The subject of arranging the chairs and the*

*seating arrangement is also problematic in my opinion and this bothers me. I would like to also talk about this, and if we don't have time, maybe I could write you an email like I did two weeks ago. Would you be able to respond to it?*

EPM: *"Of course I would. Write me about everything that bothers you following the recording and in general. But now, perhaps you would be willing to add some information for me: what are the additional contents in this enrichment class? This is Grade 8 – do they explain the phenomena related to the magic tricks?"*

NQT: *"Based on the programme, which is very structured, I am supposed to stop and explain all the time. The emphasis is on actual learning through magic tricks. But as you see, this is a weak Grade 8 class - this is why it is called remedial - so I don't put academic pressure on them."*

EPM: *"I see in your monolog that you are debating about which teaching methods to use. You write: 'I must try to talk less and let them answer.' You write: 'How can I make more effective use of the many teaching aids I have available in this lesson?' You wrote at the end that you wanted to consult with me; do you still want to?"*

NQT: *"I would like to consult with you on another subject about which I had no time to write: time management and efficiency. This bothers me a great deal. How can I plan my time better in order to have enough time to cover all the material in the programme? Is it really important to cover everything? How can I involve the pupils more? There are some pupils in the class who are very active (about three); the rest are very passive."*

EPM: *"You have brought up two very important points: (1) Time management and efficiency; and (2) Actively involving the maximum number of pupils in the class. Where do you want to start? We may not have enough time to discuss both these issues so please let me know what you prefer."*

NQT: *"I would prefer that we talk about the second issue first. Regarding the first, I think I will be able to manage on my own; I already feel that I am gaining experience. I need more help and advice regarding the issue of involving the pupils. What do you suggest?"*

EPM: *"As usual in education it is complex, there are several possibilities available and you must choose what is best for you and your class. Do you remember what you learned in teacher training college about working in small groups? Working in pairs? Or peer teaching whereby one pupil teaches other pupils around him?"*

NQT: *"I remember everything but I thought that in a remedial class in which pupils have such special needs it would be impossible to use sophisticated methods. Therefore, I returned mainly to frontal teaching. But the pupils are making most of the presentations, as you see in the recorded lesson. I wanted to ensure that I am really teaching them and that they are listening and learning. I see in the recorded lesson that except for several moments of enthusiasm, the pupils are rather passive and are often, based on their facial expressions, not listening very attentively. So, what do I get out of frontal teaching? I also don't know if they are used to working in groups – I never asked their previous teacher. I am not sure that they know how to work in small groups."*

EPM: *"Since our time has run out<sup>3</sup> perhaps we should continue via email as we did at the beginning of the year when you wanted to ask some urgent questions. In any case I intended asking that you summarise in writing the dialogue we had and add several things."*

We continued to watch the recorded lesson for another few minutes but the next NQT arrived with her film.

After a few days I received the following email message:

*"I watched the recorded lesson again for the third time. Several subjects came up that I had not discussed in the monolog or in the reflective dialogue with you. Actually one of the subjects arose but we did not have time to discuss it, the issue of seating arrangement. During all of the lessons, the pupils would sit in rows one behind the other. In the Magic Lesson, we had to change the sitting arrangement into an open arrangement whereby the pupils faced one another and their backs were to the walls. I understood that we had to change our seating arrangement, and last week we sat in a circle without the desks. This was not good since apparently the pupils need the desks to lean on. Next week we will sit in a circle but with the desks inside the circle. They know that they are not allowed to sit too close to the magician".*

*"Last week we moved to a more advanced programme, from 'Young Magicians' to 'Magicians,' and the pupils are very pleased with this progress".*

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<sup>3</sup> Two hours of conversation are devoted to newly qualified teachers in every session and four personal conversation sessions following the filmed lesson are held during the year. In addition, four half-day general discussions are held in which all the newly qualified teachers meet and discuss subjects that come up together.



*“Regarding the subject of names, I had another idea. I asked them to help me remember their names and took responsibility for remembering a few new names in every lesson and being tested afterwards by them.”*

*Explaining the magic trick: When I watched the film, I discovered that I was explaining the trick too many times – this trick was indeed complex but I could have left the additional explanation to individual practice.*

*I see that sometimes I succeed in explaining limits to them. For example, I told them that whoever forgets his cards will not participate in the next Magic Lesson. The week after, each pupil brought his cards.*

*I know that at times it is difficult to discern between a teacher-friend and a teacher-teacher. I saw in the film that we had discussed the issue of the War in Iraq for the greater part of the lesson. The pupils were very apprehensive about this topic and today it appears to me that it was more important to talk about it than to perform another magic trick.*

Concluding now, several changes were made that I would like to mention below:

- ✓ In this lesson, one pupil chose to present a magic trick. He ‘failed’ in presenting the trick but nevertheless I felt that he was strengthened by the experience. Everyone supported and helped him.
- ✓ I presented a new magic trick. I felt that everyone was focused on me and were curious about it until a pupil walked in late and drew attention away from me. I had to present the trick to everyone again, but actually especially for him so that he could be involved. I turned his coming in late into a didactic advantage in that I naturally had to repeat what I had said.
- ✓ Teaching the magic trick apparently took too long and needed less time. I am still not managing my time well.
- ✓ A pupil in the class wears glasses but did not bring them. In the first record that I took, I am seen discussing this issue directly with him but I didn’t have time to talk to you about this. I tried recently after several lessons to get closer to him personally in order to encourage him to bring his glasses. This has not yet helped but I will keep trying.

- ✓ Next week I will use the video glasses again and record another lesson. We can discuss what we see afterwards. I think that I could learn a great deal about my work using these records.
- ✓ It is more difficult in a remedial class; the vision is different since the pupils already know tricks (cups on pompoms). I must bring in a cassette playing the right kind of background music. I teach them that magic is not witchcraft rather an illusion. It will teach them also in day-to-day life to observe and study if a trick is involved.”

#### **D. Subsequent Monolog**

I will present here contents of another letter from the same NQT that was sent to me as a reflective monologue prior to an additional planned meeting following the recording of another lesson during the month of February.

*“I am sending you the subjects I saw while watching myself in the film. On second thought, it appears that we have made progress in some areas but have not succeeded in many others...”*

*At the beginning of the lesson, I was tested in the ‘names exam.’ This situation created proximity, humour, barrier breaking and identifying – it showed that the teacher also has weaknesses. I took advantage of the humorous situation and openness and told Natalie, the new immigrant from the former Soviet Union, that she had missed several lessons. If I could be responsible for remembering names, perhaps she could also be more responsible and attend more lessons...*

*The lesson structure is nowadays generally fixed: 2-3 pupils present a magic trick learned in the previous lesson, the other pupils give their feedback, a new magic trick is presented and taught, and the trick is practiced in pairs. There is slightly more involvement...*

*Suddenly it started to rain heavily and it excited them. Nature has done wonderful tricks in the sky...the demonstration was powerful and they asked for explanation...I wanted to explain what I learnt in geography, but I decided on the spot that we will treat it as magic and every pupil including me will look for explanations...I wrote on the board two sources for information, a website about weather and a book about the climate in north Israel. We enjoy such moments...I feel that they like my lessons...*

*If only Avi would bring his glasses. I wanted to convince him to wear them but he still did not bring them. I am very involved in my pupils’ problems (even though I*

*It is especially important to be consistent with Grade 2 pupils. When I must decide between being human or being consistent, I will choose to be human. The pupils can apparently tell the difference.*

## **E. My Conclusion**

As may be seen above in the monologues and the dialogues, a diversity of key issues have been brought up: the issue of remembering pupils' names (when talking about professional teachers and not homeroom teachers), seating and class arrangement, teaching methods, integrating pupils having special needs, time management and efficiency, disciplinary problems, presenting limits, tardiness, etc.

This documentation demonstrates only part of the rich pedagogical issues that were the materials for my research. Dori was the NQT that was labeled by E55 and demonstrated the NQTs concerns about the ecology of her classes and the environment of her pupils, she could represent other issues but it was the most discussed.

When a teacher who is filming wears glasses, adding another pair of glasses is indeed problematic. Only 4 of these teachers agreed to try to film using the video glasses in addition to their own glasses. They told us that they were very cumbersome and very often distracted the pupils.

There was another case of the teacher who filmed who claimed that the video glasses caused her physical discomfort with the wires and the transmitter. She also became angry after she discovered that, due to a disconnected wire in device attached to the glasses, an entire lesson in a class she thought that she had been filming was lost (she forgot to check if she was transmitting and recording by using a small video intended for this purpose).

Four of the NQTs taught frontal teaching during the past year in high school and prepared pupils having difficulties for their matriculation exams. They filmed once using the video glasses and reported that several pupils sitting immediately in front of them, not more than half a meter away, did not raise their heads and look into the camera since they felt uncomfortable about doing so. Therefore, we decided, of course with my approval, that a conventional wall-mounted camera would be preferable in this case study and would not embarrass so many pupils. The teachers took three films and found the technique much more natural and successful. I also learned that the new video glasses were not always suitable.